History of Domestic and Foreign Commerce of the United States

BY

EMORY R. JOHNSON, 2,80
T. W. VAN METRE, G. G. HUEBNER, AND D. S. HANCHETT

With Introductory Notes by
HENRY W. FARNAM

VOLUMES I AND II
IN ONE VOLUME

WASHINGTON, D. C.
PUBLISHED BY THE CARNEGIE INSTITUTION OF WASHINGTON
1915

REPRINTED 1922

CARNEGIE INSTITUTION OF WASHINGTON, PUBLICATION No. 215A
(VOLS. I AND II IN ONE VOLUME)

REPRINTED BY COLUMBIA PLANOGRAPH CO.
WASHINGTON, D. C.

History of Domestic and Foreign Commerce of the United States

BY

EMORY R. JOHNSON,
T. W. VAN METRE, G. G. HUEBNER, AND D. S. HANCHETT

With Introductory Notes by
HENRY W. FARNAM

VOLUME I

CONTRIBUTIONS TO AMERICAN ECONOMIC HISTORY

FROM THE

DEPARTMENT OF ECONOMICS AND SOCIOLOGY

OF THE

CARNEGIE INSTITUTION OF WASHINGTON

INTRODUCTORY NOTE.

The general plan under which the Department of Economics and Sociology of the Carnegie Institution of Washington has been prosecuting its work was first outlined in 1902 by a special committee, consisting of the late Colonel Carroll D. Wright, Professor John Bates Clark of Columbia University, and the writer. In 1903 the outline was elaborated, and an appropriation was made by the trustees of the Institution for its execution. The work was begun in 1904.

The plan contemplated an extended study of the economic history of the United States, to be carried out by the cooperation of a large number of scholars. The subject was divided topically into eleven divisions, and a twelfth was added in 1906; each was placed in charge of an economist selected with particular reference to his familiarity with the topic assigned him. Within each division it was designed to secure special studies or monographs on topics not yet adequately treated in economic or historical literature, and to use these as the basis of a comprehensive treatise covering the entire subject-matter of the division. It was expected that, as a rule, each summary would be written by the head of the division, but in several cases it has been found best to assign diffe.ent chapters to different authors. The title adopted for the work as a whole is *Contributions to American Economic History*. In consequence of resignations and, in the case of Colonel Wright, of death, changes have been made from time to time in the heads of four of the divisions, the organization of which since 1909 has been as follows:

Division I. Population and Immigration, Prof. Walter F. Willcox,
Division II. Agriculture and Forestry, President Kenyon L. Butterfield,
Division III. Mining, Mr. Edward W. Parker,
Division IV. Manufactures, Dr. Victor S. Clark,
Division V. Transportation, Prof. B. H. Meyer,
Division VI. Domestic and Foreign Commerce, Prof. Emory R. Johnson,
Division VII. Money and Banking, Prof. Davis R. Dewey,
Division VIII. Labor Movement, Prof. John R. Commons,
Division IX. Industrial Organization, Prof. J. W. Jenks,
Division X. Social Legislation, Prof. Henry W. Farnam,
Division XI. Federal and State Finance, Prof. Henry B. Gardner,
Division XII. The Negro in Slavery and Freedom, Mr. Alfred H. Stone.

In addition to the *Contributions to American Economic History*, it was decided to compile and publish a comprehensive index of the economic material found in the public documents of the States of the United States, and this work was intrusted to Miss Adelaide R. Hasse,

librarian in the Department of Public Documents of the Public Library of New York City. Thirteen volumes of this index have already been published by the Carnegie Institution of Washington.

Colonel Wright, besides taking charge of the Division of Labor, served as chairman of the Department, and directed the general course of its work down to the time of his death in 1909, when the writer was chosen to succeed him. During the years which have elapsed since the beginning of actual work a large amount of material has been accumulated. This is represented in part by 64 monographs published independently of the Carnegie Institution of Washington, over 70 articles published in periodicals, and about 112 still unpublished studies, besides the *Documentary History of American Industrial Society*, in 11 volumes, edited by Professor Commons and associates, and the 14 volumes of the *Index of Economic Material in Documents of the States*, referred to above.

Work of this kind is slow at best, and the completion of divisional volumes has been retarded in many cases, not only by the demands made upon the collaborators to undertake other responsibilities, but also by special mishaps. The study of the history of commerce now issued in two volumes is the first of the divisional summaries to be published.

Professor Johnson, who is the author of the first part of the book, and who has carefully directed, supervised, and edited the whole, has brought to his task an exceptional equipment. Besides filling the chair of Transportation and Commerce in the University of Pennsylvania, he has served as an expert on transportation for the Industrial Commission, as a member of the Isthmian Canal Commission, as an expert on traffic for the National Waterways Commission, as special commissioner on the Panama Canal traffic, tolls, and measurement of vessels, as well as in other important public offices. He was also, from 1901 to 1914, editor of the Annals of the American Academy of Political and Social Science. His associates in the preparation of these volumes have been taken from the teaching staff of the University of Pennsylvania, as indicated in the preface. It is hoped that the work will commend itself not only to scholars but also to general readers.

The writer is convinced that it is only by studying the past that we can understand the present and build a better future, and his work in the Carnegie Institution of Washington has served to impress him more and more with the abundance and the value of the economic experiences of the United States. But the size of the country, its diversity in soil, climate, and natural resources, the heterogeneity of its population, the articulated nature of its political organization, which in one great Federal empire embraces forty-eight commonwealths, each

pursuing its own public policy in large fields of legislation, though in others subject to the authority of the Congress, the President, and the Federal Judiciary, all create a situation the complications and contradictions of which are often baffling to the student. At the same time these very factors make the United States a vast laboratory of sociological and economic experimentation, such as no other part of the modern world can duplicate. It is the difficult yet stimulating task of the economist, first to ascertain and accurately record the facts, then to interpret them; and finally to use them as the basis of induction. While the *Contributions* are confined to the first two of these activities, it is hoped that they will supply the systematic economist with material which will be useful for the third.

HENRY W. FARNAM.

YALE UNIVERSITY, *September 1915.*

NOTE TO THE ISSUE OF 1922.

The History of Domestic and Foreign Commerce was the first of the *Contributions to American Economic History* issued by the Carnegie Institution of Washington. The fact that the edition has been exhausted indicates that the work has met a real demand on the part of economic students and they will be gratified to know that the Carnegie Institution has consented to issue a reprint.

The *Contributions* have now been continued by the publication in 1916 of Dr. Victor S. Clark's *History of Manufactures from 1607 to 1860*, which was followed in 1917 by the *History of Transportation before 1860*, prepared under the direction of Dr. B. H. Meyer of the Interstate Commerce Commission, and in 1918 by the *History of Labour in the United States* by Professor John R. Commons and collaborators. The latter was published by the Macmillan Company, New York, the others by the Carnegie Institution. The group of economists who directed the work of the Department of Economics and Sociology in the Carnegie Institution were, upon the discontinuance of that Department in December, 1916, reorganized as the Board of Research Associates in American Economic History, and have in preparation other studies in the same field.

HENRY W. FARNAM.

JANUARY, 1922.

PREFACE.

This *History of Domestic and Foreign Commerce of the United States*, which constitutes one division of the *Contributions to American Economic History*, comprises two volumes. The first volume contains three parts, dealing, respectively, with "American Commerce to 1789," "The Internal Commerce of the United States," and "The Coastwise Trade." Volume II also has three parts devoted, respectively, to "The Foreign Trade of the United States Since 1789," "American Fisheries," and "Government Aid and Commercial Policy;" this volume also contains a classified bibliography, which it is hoped will prove useful to readers and special students of American commerce.

Part 1 of volume I, with the exception of chapters IX and X, was written by myself, and I intended, when the task was undertaken in 1904, to write the entire work. This proved impossible; but I have directed the investigation and edited the work of the collaborators. In the preparation of the final volumes I was most fortunate in having the assistance of Dr. T. W. Van Metre, who teaches the history of American commerce at the University of Pennsylvania, and of Dr. G. G. Huebner, assistant professor of transportation and commerce in the same institution. Dr. Van Metre wrote parts 2 and 3 of volume I and part 2 of volume II. Professor Huebner wrote part 1 of volume II, with the exception of chapter XXII, which was done by myself. Part 3 of volume II was written by Dr. David S. Hanchett, formerly assistant in transportation and commerce at the University of Pennsylvania. The author's name is attached to the part or parts written by him.

The final work, as presented in these two volumes, is based in part upon monographic studies made by collaborators. Professor S. S. Huebner and Dr. (now Assistant Professor) G. G. Huebner prepared an elaborate, and as yet unpublished, historical account of *The Foreign Trade of the United States*. Professor Thomas Conway, Jr., has written an unpublished study of *The Coastwise Commerce of the United States*. Assistant Professor Raymond McFarland, then principal of the Leicester Academy, Leicester, Mass., wrote *A History of the New England Fisheries* that was published by the University of Pennsylvania. The history of American fisheries other than those of New England was worked up by Dr. Walter Sheldon Tower, now associate professor of geography at the University of Chicago. This study of fisheries has not been published. Dr. Tower also wrote a monograph upon *A History of the American Whale Fishery* that was published by the University of Pennsylvania. Dr. Albert A. Giesecke, now Rector of the Univer-

sity of Cuzco, in Peru, wrote a monograph upon *American Commercial Legislation Before 1789* that was published by the University of Pennsylvania. Dr. Chester Lloyd Jones, now associate professor of political science at the University of Wisconsin, prepared a monograph upon *The Consular Service of the United States* that was published by the University of Pennsylvania. Dr. (now Professor) J. Russell Smith wrote a monograph upon *The Organization of Ocean Commerce*, published by the University of Pennsylvania. Later, Professor Smith elaborated this monograph into a volume upon *The Ocean Carrier*, published by G. P. Putnam's Sons.

The collaborators who prepared monographs and the authors who aided in the preparation of the final volumes have made possible the completion of this contribution to the history of American commerce. Their assistance is greatly appreciated.

EMORY R. JOHNSON.

UNIVERSITY OF PENNSYLVANIA, *September 1915*.

CONTENTS.

PART I.—AMERICAN COMMERCE TO 1789.

BY EMORY R. JOHNSON.

CHAPTER I. PAGE

Geographic Influences Affecting the Early Development of American Commerce 3

Development of commerce the resultant of many causes, 3. Analysis of the conditions controlling economic progress, 3. The continental shelf and the fisheries, 5. Shore line and harbors, 6. The rivers, the fur trade, and water power, 7. Glaciation and its consequences, 8. The Coastal Plain and Fall Line, 9. The Piedmont, 11. The Appalachian or Great Valley, 12. The rivers as highways of inland commerce, 13. The Allegheny passes and the beginnings of western commerce, 14. General results of geographic control, 15.

CHAPTER II.

The Beginnings of American Commerce, 1600 to 1660 17

Newfoundland fisheries in the sixteenth century, 18. Settlement of America begun by chartered trading companies, 18. Services of chartered companies in early development of American commerce, 18. The London Company and early trade of Virginia, 21. The Plymouth colony and its early trade organization, 25. The Massachusetts Bay colony and its early trade organization, 26. The Laconia Company, 28. New Netherland and its trade, 28. Patroonships and their results, 29. Early trade of New Jersey and Maryland, 30. Beginnings of intercolonial trade, 31. General survey of American commerce in 1660, 33.

CHAPTER III.

The Commercial Policy of England toward the American Colonies: The Acts of Trade 35

The mercantile theory, 35. Origin of the Navigation Acts, 37. The Navigation and Trade Acts of 1651, 1660, and 1663, 39. The Administrative Acts of 1673 and 1696, 42. The Molasses Act of 1733, 42. British regulation of colonial manufactures, 44. English bounties, preferential duties, drawbacks, and other encouragements to colonial industries and trade, 46. The Grenville, Townshend, and North Acts, 1764–1770, 48. Effects of the British commercial policy upon colonial industry, commerce, and manufactures, 49. The illegal trade of the colonists, 51. Summary of the effects of the Acts of Trade, 52.

CHAPTER IV.

Commercial Policy of the Colonies 54

Legislative power of colonies over commerce, 54. Authority exercised by Parliament, the Privy Council, and King, 55. Import duties of the colonies, 56. The four purposes of import duties, 57. Export duties, 59. Bounties, 60. Inspection laws, 62. Embargoes, 63. Tonnage duties, 63. Regulation and administration of ports, 64. Summary of commercial legislation in the colonies, 65.

CHAPTER V.

The Early Development of American Commerce from 1660 to 1700 66

Significance of the period, 66. Economic and political status of the colonies from 1660 to 1700, 67. Leading industries: agriculture, 70; fur trade, 71; appropriation of forest resources, 71; the fisheries, 72; manufactures, 72; ship-building, 72. The maritime trade of the colonies as a whole, 73. New England's commerce, 75. The trade of New York and East Jersey, 77. The trade of Pennsylvania, West Jersey, and Delaware, 78. The commerce of Maryland and Virginia and the Carolinas, 79. General survey of commercial conditions, 81.

CHAPTER VI. PAGE

Eighteenth Century to the Outbreak of the Revolution............. 84

Effect of wars upon progress of American commerce, 84. Estimated population of the colonies in 1700 and 1760, 85. General industrial and commercial changes from 1700 to 1775, 86. The value and growth of the commerce of the colonies, (a) with Great Britain, 88, (b) with sections of world outside of Great Britain, 90. Value and distribution of trade of colonies in 1769, 92. Trade with the West Indies, 93. The Sugar Act of 1733 and its slight effect, 95. Illegal trading of the colonies during the Seven Years' War, 96. The illegal trade with the French at Monte Cristi, 98. Trade with West Indies after 1763, 99. The African slave trade, 100. Causes of the slave trade, 102. Commerce from the Peace of Paris to the Declaration of Independence, (a) value of exports and imports, 105, (b) prosperity of whaling and other fisheries, 106. Great Britain's bounties on hemp, masts, indigo, and naval stores, 106. Failure of British taxes on commerce of the colonies, 107. Monetary conditions as affecting commerce in the eighteenth century, 108. Summary, 110. Sources of statistical information concerning American colonial commerce, 112. Documentary sources and other references, 113. Statistics of exports from the colonies in 1770, 118. Statistics of the trade between Great Britain and the colonies, 1697 to 1776, 120.

CHAPTER VII.

Period of the Revolution and Confederation, 1775–1789.............. 122

Indirect trade with Great Britain during the Revolution, 122. The effects of the war upon American trade, 123. Effect upon American shipping and ship-building, 123. Reasons why trade was chiefly with Great Britain after the Revolution, 125. Conditions affecting American commerce, from 1783 to 1789, 127. British regulations affecting American commerce, 1783–1795, 128. Changes in destination and routes of American foreign trade, 130.

CHAPTER VIII.

American Commercial Policy, 1776 to 1789........................ 132

Commercial policy determined by the States, not by the Confederation, 132. Commercial legislation during the Revolution, 133. Import duties during the Revolution, 134; between 1783 and 1785, 135; from 1785 to 1789, 136. The impost legislation of Massachusetts, 136. The Pennsylvania tariff law of 1785, 137. The impost duties imposed by other States, 138. Discriminating duties in aid of American shipping, 139. Tonnage taxes, 140. Export duties, 140. Production bounties and navigation laws, 141. Commercial legislation of the Confederation, 142. General characteristics of the period, 143.

CHAPTER IX.

The American Fisheries before 1789. By T. W. Van Metre.......... 145

Dominant position of New England in American fisheries prior to 1789, 145. American fisheries in the sixteenth century, 146. Development of New England fisheries during the seventeenth century, 148. Establishment of the whaling industry, 152. Struggles with France over the fisheries, 153. Extent of the New England fisheries in 1731, 154. The fisheries from the Peace of Paris to the Revolution, 156. Effect of the Revolution upon the fisheries, 158. Provisions as to fisheries in the Treaty of 1783, 159. Revival of cod fishery from 1786 to 1790, 160. Depressed condition of the whale fishery, 161.

CHAPTER X.

American Coastwise Trade before 1789. By T. W. Van Metre....... 162

The beginning of the coastwise trade, 162. Conditions in the northern colonies favorable to coastwise trade, 164. British Navigation Acts and the colonial coastwise trade, 165. Evasion of the Navigation Acts, 166. Effects of the Acts, 167. Character and volume of the intercolonial coastwise trade, 167. The trade between the northern and southern colonies, 169. Statistics of vessel entrances and clearances in 1769, 171. Interstate trade after the Revolution, 172. Commercial provisions of the Constitution, 173.

CHAPTER XI. PAGE.

The Organization of American Commerce in the Seventeenth and Eighteenth Centuries.............................. 175

Place of the trading companies in early commerce, 175. The period of the merchant carrier, 178. Reasons why merchants were their own carriers, 179. Size of the *Mayflower* and other vessels, 181. Effects of British legislation upon colonial trade, 182. Trade conditions following 1783, 184. Effect of the establishment of the National Government, 184. Direct trade with the Far East, 185. Early merchant princes, 185. Appearance of the common carrier on the sea, 186. Charter traffic, 187. Attempts to establish line services between Europe and America, 188.

PART II.—INTERNAL COMMERCE OF THE UNITED STATES.

BY T. W. VAN METRE.

CHAPTER XII.

Volume and General Character of the Internal Commerce of the United States.............................. 193

Definition of internal commerce, 193. Internal commerce larger in volume than the foreign trade, 194. Resources and industrial characteristics of different sections of the United States, 195. The Northeastern States, 195. The Southern States, 197. The Central States, 198. The Rocky Mountain States, 199. The Pacific States, 199. Tonnage of commerce by rail in 1910, 200.

CHAPTER XIII.

Early Development of the Internal Commerce of the United States, 1789 to 1830.............................. 202

Location of settlements and commercial cities, 202. Inland transportation, 203. The Mississippi River as an outlet for the trade of the Ohio Valley, 205. Opening of the Mississippi River and the purchase of Louisiana, in 1795, 206. Growth in population of the United States from 1790 to 1810, 208. The War of 1812 and the growth of the West, 211. Internal trade in 1810, 212. Use of steamboats on the Mississippi, 213. Trade of New Orleans in 1818, 214. The panic of 1819 and its effects, 216. The American system, 218. Effect of opening of the New York canals in 1825, 220. Building and aid of canals and turnpikes by the States, 221. Summary, 222.

CHAPTER XIV.

Expansion of Internal Commerce, 1830 to 1860.............................. 224

Increased area and population of United States, 224. Development of industries, 225. Growth of manufactures, 226. Extension of transportation facilities, 227. Trade of Eastern with Central States via Erie Canal and Great Lakes, 230. The grain trade, 230. Development of the Great Lakes district, 234. Trade on the Pennsylvania Canal system, 235. Trade via the railroads between the East and West, 237. Growth of inland commerce in the Southern States, 240. Internal trade between the North and the South, 241. Active period of the river trade, 241. The commerce of the Mississippi Valley, 242; of New Orleans, 243; of St. Louis, 243; of Cincinnati, 244. Diversion of traffic from the Mississippi River to the eastern railroads, 247. The domestic slave trade, 248. The internal trade of the far West, 248. Summary, 250.

CHAPTER XV. PAGE

Economic Development, 1860 to 1900 254

Changes produced by the Civil War, 254. Development of the United States from 1860 to 1900 in population and wealth, 256; in agriculture, 257; in mining, 262; in lumbering, 263; in manufacturing, 263; in transportation, 266.

CHAPTER XVI.

Internal Trade, 1860 to 1900 270

Broad scope of internal trade of the United States, 1860–1900, 270. Trade in cereals and flour, 271. Live-stock and animal products, 276. Cotton, 278. Other farm products, 282. Coal, 283. Iron ore, iron, and steel, 285. Other minerals, 286. Forest products, 287. Progress of manufactures, 290. Growth of the volume of internal commerce, 293. Summary, 293.

CHAPTER XVII.

Organization and Management of Internal Trade 296

Transportation and communication, 296. The express service, 298. The telegraph and postal services, 299. Functions and development of markets and of produce exchanges, 300. Federal and State banking, 303. First and second United States Banks, 304. Regulation of banks by the States and the consequences, 305. Development of corporations, 307. Evils resulting from lack of regulation, 309.

CHAPTER XVIII.

Commercial Changes of the Opening Years of the Twentieth Century... 313

Growth of population and industry, 1900 to 1910, 313; of agricultural industries, 313; of manufacturing, 315; of minerals, 316; of forest products, 316. Development of transportation and internal trade, 316. Growth of electric railways and the use of electricity, 317. Waterway improvement and projects, 318. Public regulation of transportation and commerce, 319. Regulation of corporations, 321. Revision of the tariff, 322. The conservation movement, 323.

PART III.—THE COASTWISE TRADE.

BY T. W. VAN METRE.

CHAPTER XIX.

The Coastwise Trade of the Atlantic Coast, 1789 to 1860........... 327

Legislation concerning coastwise vessels, 1789–1793, 328. Registry and enrollment of vessels under law of 1792, 330. Development of the coastwise trade to 1830, 332. Importance of cotton culture to the coastwise trade, 332. Nature of the trade of the South with the North, 333. Effects of the embargo and non-intercourse acts and the War of 1812, 334. Adoption of the protective tariff policy, 335. Foreign vessels excluded from the coastwise trade, 1817, 336. Establishment of "great districts," 1819, 336. Nature and volume of the coastwise trade in 1830, 338. The coastwise trade at leading seaports, 339. The coastwise trade from 1830 to 1850, 341. Increase in tonnage of coastwise fleet, 342. Coastwise receipts and shipments at New York, Philadelphia, Baltimore, and Boston, 1830 to 1850, 342. The coastwise trade at South Atlantic and Gulf ports, 344. The decade from 1850 to 1860, 345. Competition of railroads with coastwise lines, 1850–1860, 345. Increase in coastwise trade, 1850 to 1860, 346. Growth in number of steamship lines, 346.

CHAPTER XX. PAGE.

The Coastwise Trade of Atlantic and Gulf Coasts Since 1860........ 348

Changes in the coastwise trade after the Civil War, 348. Effects of competition between the railroads and the coastwise carriers, 349. Decline of New Orleans in the coastwise trade, 350. Development 1880 to 1900, 351. Incompleteness of Government statistics of coastwise trade, 352. Act of 1906 establishing five "coastwise districts," 353. Growth of coastwise trade from 1900 to 1912, 353. Coastwise entrances at New York and Boston in 1902 and 1911, 354. Ownership of coastwise lines by railroad corporations and proposed regulation of coastwise carriers by the Federal Government, 356.

CHAPTER XXI.

The Coastwise Trade of the Pacific Coast and the Intercoastal Trade.. 357

Beginnings of the intercoastal trade, 358. Effect of the discovery of gold in California in 1848, 358. Entrances of vessels at San Francisco, 1850–1853, 359. Coastwise trade of the Pacific coast, 359. Intercoastal trade, 1869–1913, 361. Traffic via Cape Horn and via Isthmus of Tehuantepec, 362. General effect of the Panama Canal on the intercoastal traffic, 363.

MAPS.

1. Physical Map of the United States........................Frontispiece

Facing page

2. Map of the Canals and Railroads in the United States in 1840..... 228
3. Map of the Railroads in the United States in 1860.............. 246
4. Map of the Railroads in the United States in 1880.............. 268
5. Map of the Railroad in the United States in 1910.............. 316

PART ONE

AMERICAN COMMERCE TO 1789

By EMORY R. JOHNSON

CHAPTER I.

GEOGRAPHIC INFLUENCES AFFECTING THE EARLY DEVELOPMENT OF AMERICAN COMMERCE.

Development of commerce the resultant of many causes, 3. Analysis of the conditions controlling economic progress, 3. The continental shelf and the fisheries, 5. Shore line and harbors, 6. The rivers, the fur trade, and water power, 7. Glaciation and its consequences, 8. The Coastal Plain and Fall Line, 9. The Piedmont, 11. The Appalachian or Great Valley, 12. The rivers as highways of inland commerce, 13. The Allegheny passes and the beginnings of western commerce, 14. General results of geographic control, 15.

The development of the commerce of any country is a resultant of many causes. Social ideals, individual traits and aptitudes, the status of political organization, the legislative policies followed—each of these has had its influence; but they are neither the primary nor the most potent determinants of the nature and scope of a nation's commerce. Economic conditions are the cause of trade and they most strongly control its growth.

Social ideals may strengthen the impulse of the individual to trade and cause him to develop mercantile and maritime traits. The history of New England for more than two centuries affords a striking confirmation of this truth. The aspiration of a country to become an impregnable naval power will impel the government to give large aid to trade and shipping—a fact amply verified by the history of Japan since 1895, of Germany since 1890, and of England and Great Britain since 1650.

When social ideals, individual aptitudes, and economic conditions harmonize, and are favorable to international commerce and to the building and operation of ships, as they are to-day, to a marked degree in Great Britain and Germany and largely in Japan, legislation for the promotion of commerce and shipping may be an effective auxiliary; but when these fundamental prerequisites are wanting, as they are in great part in France, laws can accomplish but little. During the latter half of the nineteenth century the social and economic conditions controlling the investment of capital and the expansion of industry in the United States brought about a large foreign trade; but ships could not be built profitably for sale abroad or for operation in competition with vessels under the flags of other countries.

ANALYSIS OF THE CONDITIONS CONTROLLING ECONOMIC PROGRESS.

The economic conditions that control the development of industry and commerce are partly natural or geographic, and partly artificial or of man's creation. The earth, as the field of human endeavor, broadly controls what man may do; it may bestow free gifts upon mankind;

it may, and more often does, place obstacles, more or less difficult to surmount or circumvent, between man and the goal of his efforts; or it may fix definite limits beyond which it is vain to attempt to pass.

In the early life of the human race geographic control was absolute; with the progress of mankind, the dominance of mind over matter, of man over his physical surroundings, has increased with accelerating speed; so that to-day men are able to live and prosper in regions formerly uninhabitable and are able to live with far greater comfort than was formerly obtainable. Through mechanical power numerous forces of nature minister to the wants of man and enable him to free himself from many of the restraints of the world in which he lives.

Man's triumph over nature is, however, not complete; and if it were, the forces of nature and the earth's material resources would still largely control his life, because he can live only by cooperating with nature. Temperature, winds, ocean currents, soil fertility, mines, forests, land and sea life, these still regulate his economic life and largely mold his character.

At the time of the settlement of America, three centuries ago, industry and commerce were aided but slightly by the mechanical agencies which now enable men to modify, direct, and turn to their service the conditions imposed by their physical environment. Geographic conditions exercised such a strong influence upon the economic development of America that the history of American commerce should begin with a survey of the geography of the North Atlantic and the eastern part of North America. In making this survey, it will be best to consider the geographic control of both industry and commerce. As commerce is carried on chiefly to aid industry, both must receive attention in this analysis, although the presentation will, as far as possible, be made with reference to commerce.

The subject naturally divides itself into two parts: one covering the period of the seventeenth century and the larger portion of the eighteenth century, during which time the region between the Atlantic coast and the Allegheny Mountains was being settled and developed; the other part including the period of the occupation of the great country beyond the Appalachians—the Mississippi Valley and the West. The first period coincides roughly with the colonial epoch, the second with the national era. The mountains had been crossed and settlements had been made in the Ohio Valley before the Revolution—especially after the French and Indian war—but the real work of occupying the vast trans-Allegheny country was undertaken after the War of Independence.

The geographic conditions influencing the over-sea and intercolonial commerce of the section east of the Alleghenies, prior to 1789, were maritime and terrestrial. The settlement and subsequent development of America were largely influenced by the shape of the North

Atlantic, its winds, its currents, and its fisheries. The spread of population along the coast and toward the interior, the industries established in each colony, and their growth or decline, the over-sea and domestic exchange of products—these were largely determined by land factors, by the terrene of the Atlantic slope.

The maritime factors may be considered first. The narrowness of the North Atlantic and the eastward reach of the Grand Banks off Newfoundland made possible the regular pursuit of the fisheries in American waters by English, Dutch, Portuguese, and French during and after the early years of the sixteenth century. Fishing in America antedated permanent colonization by a full hundred years.

THE CONTINENTAL SHELF AND THE FISHERIES.

The Atlantic continental shelf of North America, or that part of the uplifted continent that is covered by the sea, slopes gently from the shore seaward, approximately to the line of 100 fathoms of ocean depth. From this line the descent is rapid to the abysmal area of the main floor of the Atlantic. On the southeastern edge of Florida the line of 100 fathoms' depth runs close to the shore, there being a moderate depression between Florida and the submarine plateau upon which the Bahama Islands are built. Northward from Florida the continental shelf gradually widens, with the exception of a slight narrowing of the shelf by the eastward projection of the North Carolina shore above and below Hatteras, the width off Georgia and South Carolina averaging about 100 miles. From New Jersey eastward and northward the shelf rapidly broadens until it reaches its maximum breadth of about 400 miles in the banks off Newfoundland, the only areas upon the broad shelf where the ocean is more than 100 fathoms deep being the central part of the broad bay between Cape Cod and Nova Scotia, the entrance to the Gulf of St. Lawrence between Cape Breton Island and Newfoundland, and limited portions of the Gulf itself.

The wealth of fish off the Atlantic coast of America from Long Island to the Grand Banks may be ascribed to two causes: (1) The broad "continental shelf" widening from south of the Nantucket shoals northward and eastward to the Grand Banks gives a large area of shallow ocean and provides a spacious home for the cod, mackerel, and other fish of commerce. (2) This home is rendered the more habitable and more populous—especially for the cod—by the cool water brought down from the Arctic latitudes by the Labrador current that flows past Labrador, through the Gulf of St. Lawrence, about Newfoundland, over the Grand Banks, and along Nova Scotia and the New England coast until it is overcome by its opponent, the more powerful north-flowing Gulf Stream.

The oyster and shad fisheries of the middle Atlantic seaboard are of much economic value, and there are sea fisheries of importance along

the south Atlantic and Gulf States of the United States. The oyster fisheries of Maryland are now of great value; but during colonial times the sea-food products secured along the coasts of the middle and south Atlantic colonies held a minor rank in comparison with the fish caught in the cooler waters of the broad northern continental shelf, extending seaward from New England and Canada. When one considers the limited possibilities of agriculture in New England and the wealth of life in the ocean that washes her shores, it is easy to understand why the fisheries and the trade in fish were the most important factor in the economic development of New England throughout the colonial period.

SHORE LINE AND HARBORS.

The succession of deep bays and prominent headlands along the Atlantic coast north of New Jersey forms a shore line contrasting strikingly with the generally unbroken littoral of New Jersey and of the states to the south of Virginia. From the mouth of the Hudson eastward and to the north the sea has invaded the land, submerged a former coastal plain, and made it a part of the widened continental shelf. The only parts of the former coastal plain now rising above the sea are Long Island, Nantucket, Martha's Vineyard, and the small islands in the vicinity. Indeed, the subsidence of the land northward from Cape Cod was so great as to submerge a large part of the piedmont belt of archæan rocks adjacent to which the coastal plain had been laid down in a geologically recent period. Although a subsequent slight uplift has reclaimed from the sea a fringe of land along parts of the coast, the net subsidence is such that the rugged coast of New England north of Cape Cod, of New Brunswick, Nova Scotia, and the islands beyond is broken into bays and fiords separated by bold peninsulas and guarded by outlying islands of granitic rock. At some places, as at Mount Desert Island, the mountains rise from the sea; elsewhere the low hills of the piedmont give character to the shore formation.

From New York toward the south the coast has sunk but little, and the coastal plain, widening southward, intervenes between the sea and the belt of rolling hills forming the piedmont, or Allegheny foothills. Between what are now New Jersey and North Carolina the subsidence was enough greater than it was immediately to the north and south to form the shallow estuaries of the Delaware and Chesapeake. The drowning of the lower valleys of the Delaware and of the rivers flowing into the Chesapeake provided numerous navigable waterways across the coastal plain, and gave ample harbors to a large section of country. The beds of these bays are the favorable habitat of the shellfish, the trade in which is of great value.

The continental shelf and the Atlantic shore line have exercised an easily discernible influence upon the industrial and commercial development of the American colonies. They account for New England's

long-continued leadership in the fisheries; and they, together with the land influences to be discussed presently, go far to explain why the greater attention was given by these colonies to shipping and commerce than was given to maritime pursuits by the middle and southern colonies.

Before pointing out in detail the economic results of geographic control, it will be best to consider the more important land influences upon the life and growth of the colonies. The lines of progress taken by the several colonies were determined by land and ocean influences more or less minimized or accentuated by the differences in the social forces dominant in the northern, middle, and southern sections of the country.

THE RIVERS, THE FUR TRADE, AND WATER-POWER.

The streams afforded or denied access to the unsettled and unexplored land and were the natural highways through the country after settlements had been established, they decided the rapidity or slowness of occupation, they located and conditioned the growth of the towns as centers of inland trade and as ports of maritime commerce.

The vain search made by the English, Dutch, and French navigators for the northwest passage around America to the Orient led to the exploration of practically all the large streams from the James to the St. Lawrence. Close after the explorers came the more successful fur-traders, who secured from the savages the second contribution made by America to the wealth of Europe, the gold that was obtained from the Spanish-American mainland having been the first gift of the New World to the Old.

The Hudson River became the chief center of the early fur trade. The noble stream provided a broad highway 150 miles inland, and the Mohawk brought the tidal Hudson into easy communication with a large interior section, inhabited by exceptionally thrifty and energetic tribes of Indians. For fifty years the fur trade of the Hudson Valley, and to some extent of the surrounding country, was conducted by the Dutch, who placed this trade, at least during the first half of their occupation of the country, ahead even of agriculture.

While the fur trade of the Hudson exceeded that of other rivers, the difference was mainly in degree. The Connecticut and the lesser streams of New England, the Delaware, Lehigh, Schuylkill, Susquehanna, Potomac, James, and the many tributaries of the Chesapeake floated the peltry-laden Indian canoes down to the interior and coastwise posts of the traders.

The people of New England did not give so much attention to the fur trade as did the Dutch to the west and south, nor so much as did the French on the north. In the earlier years of their colonial life the Dutch and French could make the purchase and sale of peltries their

chief business, because the Hudson and St. Lawrence made that possible. In New England, on the contrary, the rivers, with the exception of the Connecticut, were short and were rendered unnavigable, almost from their mouths up, by numerous rapids and falls. In this regard, however, New England's limitation was her good fortune. The profits derivable from the fisheries, agriculture, and commerce, and the social benefits resulting from their pursuit, so far exceed those of fur trading that the economic and social progress of a colony is hindered rather than aided by giving much of its energy and capital to trading in furs.

The fact that most of the streams of New England were small and had rapids or falls near the sea had several consequences. The settlements and towns were located near the ocean, and the early life of New England was carried on largely within sight and sound of the sea. As the settlers advanced inland and occupied the country for agriculture, they found the soils, which throughout New England were the result of glaciation, to be stony or sandy in many sections and fertile in only limited areas. The gains to be made from farming, while sufficient to cause New England to have a steady development in agriculture, did not so lure men away from the sea as to check the steady and rapid growth of fishing, ship-building, and trading. Before the colonial period came to an end the unrivaled water-power afforded by the New England rivers began to be used to a small extent for industrial purposes. Later, in the early decades of the nineteenth century, when capital had become more abundant and machinery had been improved, this water-power made New England the manufacturing center of the United States, and gave character to her entire industrial development.

GLACIATION AND ITS CONSEQUENCES.

The glacial deposits covering New England, New York, and northern New Jersey and Pennsylvania determined their soils and largely conditioned their economic activities. In New England the deep covering of glacial material made the country yield moderate or meager returns to agriculture, except in the limited areas of the alluvial soil, but to compensate for this parsimony nature was bounteous in her gift of grand forests and of ample water-power. Glaciation remodeled the drainage system, constructed numerous lake reservoirs in the river valleys, forced the streams into new channels, and sent their waters hurrying over rapids and tumbling down cataracts. The till and sand formed a thick sponge that absorbed the water falling in the copious rains and abundant snows, distributed it by filtration slowly to the streams, and gave the rivers a nearly even flow throughout the year. Thus the forests and natural harbors of New England favored ship-building and commerce, while the free gift of water-power, abundant, widely distributed, and reliable, predestined her to an industrial career.

The results of glaciation in New York and northern New Jersey and Pennsylvania differed from the results in New England. The débris left by the ice cap as it receded from New England consisted of materials worked up from rocks that made less generally fertile soils than were manufactured from the rocks which were supplied to the ice mill by the section to the west and south of the Green Mountains and the Berkshires. This is especially true of New York State, the river valleys and wide interior of which rank high in agriculture. Northern New Jersey and northeastern Pennsylvania are less fertile. The water-power resulting from glaciation west of New England was less per unit of area and in most cases was located so far inland as not to be economically available at an early date.

THE COASTAL PLAIN AND FALL LINE.

South from the valley of the Hudson the section of country between the ocean and the Allegheny front is separable into three well-marked divisions. Along the Atlantic lies the coastal plain made up of sandy or gravelly soils interspersed with areas of clay and of alluvium. This plain, narrow at the north but widening southward to a breadth of 200 miles, the remnant of one that formerly extended from the Grand Banks to the Gulf of Mexico, was laid down in the geological yesterday under the margin of the sea when the ocean reached inland to the old archæan uplift now represented by the rolling uplands of the piedmont. The submarine plain thus constructed of the materials eroded from the archæan highland was subsequently raised above the level of the sea. A recent subsidence of the coast has restored to the sea a portion of the land in the neighborhood of the Chesapeake and the lower Delaware and has enabled the ocean to regain more ground than it had lost north of Long Island; but most of the southern half of the plain remains dry land. The sands, gravels, and clays of the geologically youthful coastal belt rest upon the lower-lying old rocks of archæan antiquity, and the west-northwest, or inland, margin of the recently made plain borders directly upon the ancient piedmont.

The union of these two belts, the coastal plain and the piedmont, is clearly marked by the "fall line." Rapids and falls of moderate descent are formed as the rivers that flow across the piedmont pass from the resistant archæan rocks to the easily eroded strata of the coastal plain. The ocean tides invade each river to the fall line, and made most of the streams readily navigable for the oceangoing ships employed prior to the use of the large modern steamers. The natural and favorable location for a seaport and for a manufacturing city being at or near the head of river navigation for ocean vessels, at the point where there is power for industry and a free highway for commerce, the fall line from New York south may be traced on the map by a line passing through Trenton on the Delaware, Philadelphia between the

Schuylkill and the Delaware, Baltimore on an arm of the Chesapeake, Washington on the Potomac, and Richmond on the James. Further south the fall line passes close to Raleigh near the Neuse, Columbia on the Congaree, and Augusta on the Savannah. Raleigh is not a river city. Columbia and Augusta are at the head of steamboat navigation, but are situated too far inland on relatively small streams to have ever been the head of ocean commerce. The earlier and later cities of first importance in the Carolinas and Georgia, where the coastal plain is widest, were located near the sea., *e. g.*, Wilmington, Charleston, and Savannah.

The cities along the fall line from New Jersey to Virginia early became the commercial centers both of the coastal plain, where the earliest settlements and plantations were established, and of the piedmont, into which population easily spread by way of the many river valleys. North of Virginia the piedmont, being narrow, readily accessible, and fertile, was settled earlier than it was in and south of Virginia, although the Virginia plantations had overpassed the coastal plain long before the Revolutionary War.

To the north and east of the Chesapeake, where a small-farm agriculture prevailed, the increase and spread of population caused cities to grow up as centers of trade and industry; but in the section of the country where the land was held in plantations, trade did not center in cities, but was segregated among the plantations and small towns. Baltimore, near the head of the Chesapeake, grew not only because it was the market for Maryland, but also as a result of being an important emporium for the trade up and down the Susquehanna Valley. Even so, it did not rival Philadelphia in rate of growth during the eighteenth century.

In structure and fertility, the sandy, light soils, the alluvial river plains, and the salt and fresh water marshes of the coastal belt were in sharp contrast with the soils formed from the piedmont gneiss which disintegrated into the heavy clays, such as are found in parts of Virginia, and into the lighter micaceous and sandy clays prevalent in southeastern Pennsylvania. In general, the lands of the coastal plain, with the exception of the limited areas of alluvium, were less fertile and more easily exhausted than were those of the piedmont, but the soils near the sea had the merit of being easily brought into cultivation during those early years of settlement when the colonists were gaining a sure footing on the edge of the great New World wilderness.

The first permanent colony in America was planted on the river bottoms and the sandy uplands along the coast and between the rivers of "tidewater" Virginia. Soon thereafter the lands about the Chesapeake in Maryland were settled. On these lands the culture of tobacco in Virginia and of tobacco and cereals in Maryland was easy and profitable; and, although the light soils could not endure the improvidence

of plantation farming, there was, at least for many decades, an abundance of virgin land within the wide plantations or on the frontier to be substituted for the worn-out fields.

The early settlers on both banks of the lower Delaware found fertile soils in the alluvium and marl belts along the estuary and tidal river; and prosperous farming antedated Penn's arrival by more than forty years.

In the Carolinas and Georgia settlement began along the shores of the broad Albemarle and Pamlico Sounds—then readily entered and traversed by ocean vessels—and at the junction of the rivers with the bays by which the sea indents the coast at numerous places from Cape Fear southward. On the low coast lands rice and indigo were the crops most grown, while from the adjacent sandy uplands the pine forests provided unlimited quantities of tar, pitch, turpentine, and rosin, the "naval stores" of those days.

The main products grown or secured from the coastal plain from Delaware Bay to Florida—tobacco, rice, indigo, naval stores—were export commodities. There could be but small market for them in America; if sold at all they must be sent across the sea; hence it was that the southern colonies had a larger commerce with Europe than did the middle and New England colonies, despite the fact that the people of the northern settlements had a more diversified industrial life and engaged far more actively in maritime pursuits.

THE PIEDMONT.

In New England the piedmont extends inland from the ocean to the mountains, while from New York south the piedmont reaches inland from the fall line to the first distinct mountain ridge. This ridge includes the highlands through which the Hudson has cut its scenic course, the highlands of New Jersey, the range of hills from the Delaware below Easton to Reading on the Schuylkill, the northern half of South Mountain running southwest from Reading toward the Susquehanna Valley, South Mountain extending from near the Susquehanna to the Potomac at Harper's Ferry, and the Blue Ridge, which from the Potomac south presents an unbroken range of mountains that grow higher and broader, until their climax is reached in the high summits and wide ranges of the Carolinas.

From the Hudson to the Potomac the piedmont belt is narrow and is made up of a rolling country of high average fertility, seldom reaching 500 feet above the sea level. The productive farming and dairying counties of southeastern Pennsylvania—with the exception of those in the Appalachian Valley to be described presently—lie within the piedmont. From the Potomac River to northern Georgia the piedmont is a broad upland country, much of which is between 500 and 1,000 feet above the sea. This wide belt of well-timbered "foot hills"

was but gradually settled and not fully occupied during the colonial period; indeed, many of the central sections of Virginia and the Carolinas are somewhat sparsely settled even to-day. Its soils average well, though not high, in fertility, but when well tilled they yield good returns. During the first half of the seventeenth century this region furnished furs for export; thereafter lumber and naval stores became most important, while plantations and farms advanced slowly up the river valleys and back from them on to the intervening divides. The first great development of the piedmont in the Carolinas and Georgia came toward the end of the eighteenth century, when cotton became a profitable crop.

THE APPALACHIAN OR GREAT VALLEY.

West of the Blue Ridge and its northern extensions, and intervening between that range of mountains and the eastern front of the broad Allegheny plateau, lies the Appalachian or "Great" Valley. This remarkable valley extends, with nearly unbroken continuity, from the Gulf of St. Lawrence almost to the Gulf of Mexico. From north to south this intermontane depression includes in turn the lower basin of the St. Lawrence River and Lake St. Peter, the trough containing the Richelieu River, Lake Champlain, and the Hudson River, the "Kittatinny" Valley across northern New Jersey, the Allentown-Lebanon-Cumberland Valley stretching across Pennsylvania and Maryland to the Potomac, the Shenandoah Valley of Virginia, the somewhat disconnected but physiographically related mountain valleys occupied by the headwaters of the Kanawha, New, and Tennessee rivers, and lastly, the valley of the Coosa River, which sends its waters by way of the Alabama River to Mobile Bay.

The Appalachian Valley is noted for its exceptional fertility. North of New Jersey glaciation has limited its productive powers, but south of New Jersey the soils of much of the valley are formed of disintegrated limestone. "There is, perhaps, no other area in the United States where as wide a range of field and garden crops will flourish with the same luxuriance as here."[1] Lying at an elevation of 500 to 2,000 feet above the sea (except in the highest mountains of North Carolina and Tennessee), and having everywhere abundant rainfall and a most favorable climate, with summers that are not enervating and winters that are only moderately cold everywhere, except in northern New York and in Canada, this valley along the eastern edge of the Adirondack, Catskill, and Allegheny Mountains early invited settlement. Indeed, within fifty years after the founding of Philadelphia scores of towns had been started in the Lebanon-Cumberland Valleys, and the occupation of the beautiful Shenandoah Valley had

[1] Shaler, *United States of America*, I, 72.

been begun by emigrants from tidewater Virginia and by the Scotch-Irish and Germans who came south from Pennsylvania. During the first two-thirds of the eighteenth century the Great Valley, and the many lesser valleys opening out from it, constituted the western frontier, towards which emigration was steadily directed.

This fertile valley, lying relatively near the sea and readily accessible, was an influential factor in the economic progress of the colonies during the fifty years preceding the Revolution. While the expenses of transportation by the ways and vehicles then available prevented the valley from exporting much of its food products over-sea, its agricultural surplus enabled the farming sections of the country nearer the seaports to ship more than they otherwise could of their grain and provisions to the West Indies and to Europe. Moreover, when the long war with Great Britain cut off the maritime commerce of America for seven years and threw heavy financial burdens upon the people of the new commonwealth, they were strengthened economically by the wealth annually created in the Appalachian Valley, the agricultural West of that day.

THE RIVERS AS HIGHWAYS OF INLAND COMMERCE.

The commercial highways of the colonies were the ocean and the rivers. Starting along the bays and at the head of tidewater navigation, settlement advanced inland along the streams and spread thence laterally over the country by way of the tributaries of the rivers. Most of the intercolonial intercourse was coastwise by the sea and on such long arms of the ocean as the Delaware and Chesapeake bays; although the rivers (the Merrimac, Connecticut, Delaware, Susquehanna, Potomac, and Savannah) were also used to a minor extent in intercolonial traffic.

Practically the only avenues of inland commerce were the rivers, which until some time after the beginning of the national period remained unimproved. The rivers, however, were far more serviceable to commerce in the seventeenth and eighteenth centuries than they are to-day; not only because traffic was then of small volume and was handled in small units, but from the fact that the rivers then drained well-forested catchment basins from which the run-off of water into the streams was less rapid in times of heavy rainfall and was more evenly distributed through the year than is now the case, when the forest areas have been greatly restricted or totally destroyed by axe, fire, and plow.

The crudely constructed boats brought the productions of the up-country settlements down the Connecticut, Hudson, Delaware, and other rivers cheaply and without great difficulty, during most of the year except in the winter, to supply the markets of the seaports and load the vessels outbound for the West Indies or Europe. The move-

ment of traffic up-stream was more expensive, but its volume was light as compared with shipments made with the current. As long as settlement was confined mainly to the river valleys, the transportation facilities afforded by the streams enabled the colonies to make steady though moderate progress. When the country east of the Allegheny Mountains came to be generally occupied, as it did toward the end of the eighteenth century, turnpike roads were constructed to facilitate long-distance traffic and the agitation for river improvement and canal construction gathered headway.

THE ALLEGHENY PASSES AND THE BEGINNINGS OF WESTERN COMMERCE.

Even before the Revolution the colonies south of New York began to push across the mountains and to plant outposts along the upper waters of the Ohio and Tennessee rivers. The main gateways of the Alleghenies were reached by ascending the rivers. The broad plateau from which the Allegheny Mountains rise slopes to the southeast as far as the valley of the New River, and consequently the Delaware, Susquehanna, Potomac, and James rivers cut their way across the ranges and reach the piedmont through deep gaps. The southern half of the Appalachian highland slopes to the west and south, and the New, Holston, and other rivers by which it is drained rise near the Blue Ridge, on the eastern margin of the plateau.

The approach from Pennsylvania was up the Susquehanna by way of its West Branch and the Juniata and its southern affluents, and thence across to the streams flowing into the Allegheny River. From Maryland and Virginia the route west was up the Potomac, either to Cumberland and over the gap to the Youghiogheny River, or up to the mouth of the Shenandoah and by that stream to its head and on into the valley of the upper James, where a route might be taken westward up the James and across to the Greenbrier and thence to the Kanawha, or a trail might be followed to and up the New River to the divide leading to the headwaters of the Holston, which was sometimes followed to its union with the Tennessee, but more frequently was left just north of the boundary of North Carolina, where passes were crossed into the valleys of the Clinch and other streams, from which the trail led through the Cumberland Gap to the headwaters of the Cumberland River. Another western route frequently taken by the tidewater Virginians was up the James and thence either by the Greenbrier River or by the Cumberland Gap. The people of Carolina had only to cross the Blue Ridge from the Yadkin and other streams to reach the New River or the streams flowing into the Holston.

The natural approaches to the West from the Atlantic seaboard lay to the north and south of the Allegheny Mountains through New York and northern Georgia; but the Hudson-Mohawk route ran

through the territory of the powerful Iroquois, who closed that route as a highway for the westward progress of the English; while at the southern end of the mountains were the Creeks and Cherokees, whom the Spaniards inspired to oppose the English. It was not until some time after the establishment of the National Government that these easier highways to the West could be safely taken.

The advance of population across the Alleghenies by these routes was the first of the great westward movements by which the American continent has been occupied from ocean to ocean. The settlements made after the close of the French and Indian War in western Pennsylvania, and in what is now Ohio, Kentucky, and Tennessee, could have no trade with the people on the Atlantic slope, because the mountains were an impassable barrier to transportation. The first commerce of the trans-Allegheny sections was carried on through New Orleans, with which they were connected by river ways. This river trade, however, did not antedate the Revolution. Regular commercial intercourse between the sections east and west of the Alleghenies began during the last decade of the eighteenth century; and it was not until the second and third decades of the nineteenth century that the transportation facilities were such as to permit much traffic to be carried across the Alleghenies.

It is an accurate generalization, that throughout the colonial period, American commerce, with the exception of the fur trade, was restricted by geographic conditions to the domestic and over-sea trade of the section lying between the Alleghenies and the ocean; that the shipment of goods from the western slopes of the Alleghenies to the mouth of the Mississippi began after the Revolution; and that the traffic east and west across the Alleghenies did not become of much importance before the beginning of the nineteenth century.

GENERAL RESULTS OF GEOGRAPHIC CONTROL.

This brief survey of the geographic conditions obtaining on the Atlantic slope of America from Newfoundland to Florida suffices to show that the productions and the consequent trade of the three large sections—the New England, the middle, and the southern colonies—were subject to dissimilar geographic controls.

By devoting themselves to fishing, shipbuilding, navigation, and to raising the cereals of the northern temperate latitudes, the settlers of New England tended to compete with the people of England. Consequently the British markets for the exports of New England were restricted both by the economic activities of the English people and—with the exception of the building and operation of ships—also by the navigation and trade laws enacted by England to protect and develop her industries. Their geographic environment predestined the New England colonists to trade, and being unable to exchange their com-

modities under favorable conditions in England for the British manufactures they required, the people of New England built up a large export trade to the West Indies and thereby secured the goods, coin, and bills of exchange with which to purchase English wares.

The colonies of New York, New Jersey, Pennsylvania, and Delaware, which were rich in agricultural and forest resources and had some mineral wealth, also found profit in engaging in the West Indian trade. These colonies could trade with the home country more easily than New England could; but their imports from England greatly exceeded their exportations to that country. Until after the close of the eighteenth century Great Britain's imports from America consisted mainly of the commodities she did not produce at home; hence it was that the tobacco of Maryland and Virginia, and the naval stores, rice, and indigo of the Carolinas and Georgia, constituted the larger share of the colonial exports to Great Britain.

The effect of the geographic forces that caused England to import a comparatively small amount of the products of New England and the middle colonies and to buy large quantities of the natural exports of Maryland and the more southern colonies was augmented by the corn laws and trade legislation enacted by England and Great Britain during the seventeenth century. American geographic conditions influenced the development of American commerce during the colonial period, and in those conditions are to be found some of the reasons why England legislated as she did in regulating the industries and trade of her American colonies.

CHAPTER II.

THE BEGINNINGS OF AMERICAN COMMERCE, 1600 TO 1660.

Newfoundland fisheries in the sixteenth century, 18. Settlement of America begun by chartered trading companies, 18. Services of chartered companies in early development of American commerce, 18. The London Company and early trade of Virginia, 21. The Plymouth colony and its early trade organization, 25. The Massachusetts Bay colony and its early trade organization, 26. The Laconia Company, 28. New Netherland and its trade, 28. Patroonships and their results, 29. Early trade of New Jersey and Maryland, 30. Beginnings of inter-colonial trade, 31. General survey of American commerce in 1660, 33.

The commercial intercourse of Europe with America preceded the planting of colonies in the New World. Spain, as the leader in the exploration of America, took possession of a large part of northern South America, the West Indies, and southern North America, accompanying her conquests with a confiscation of the stores of precious metals that had been garnered through preceding ages by the Indians in their slow progress from savagery towards social organization. The Indians having been robbed of their treasures, the Spaniards engaged extensively in the mining of silver, and thus it came about that, as an incident to the maintenance of her authority in her possessions and to the support of the mining operations of her subjects, Spain regularly despatched her merchantmen and galleons to carry supplies to America and to bring back the bullion her subjects had wrested from the natives or had unearthed from the rich stores of unmined metal. The returning treasure ships were eagerly awaited in Spain, where bullion was prized more highly than all other forms of wealth, and although the piratical prowess of the covetous English sea-rovers made England instead of Spain the actual destination of not a few treasured cargoes, the precious metals from America flowed, a copious stream, into and beyond Spain, thereby enriching the money supply and quickening the industries of all Europe.

The English, like the Spaniards, were drawn to America during the sixteenth century in part by their love of adventure—the lodestone that made pirates of reckless men, buccaneers of ambitious and not overscrupulous patriots, and explorers and pioneers of men of finer mold—and in part by that strange fascination which the precious metals have ever had for men of all lands. From the voyages of the Cabots at the close of the fifteenth century to the explorations of Gilbert and the unfortunate colonizing efforts of Raleigh and Gosnold during the last quarter of the sixteenth century, the main objects sought were gold and silver; indeed, the first settlers at Jamestown were so much more desirous of mining than of planting that only direst suffering and even starvation could force them to cultivate the soil while there was any hope of discovering mines of precious metals.

and seventeenth centuries, when corsairs and pirates haunted all the seas frequented by merchant shipping and when even minor states and petty principalities wrung as many extortions as possible from traders not strong enough to secure exemption from interference. Moreover, few if any individuals could either command sufficient capital or safely risk their fortunes in distant commerce, when at least several months and often several years must elapse before returns could be secured.

The development of a commerce with a section where colonies were to be planted or where "factories" or forts or stations were to be maintained presented especially great difficulties, too great, indeed, for the individual trader. As Professor Cheyney states:[1]

> "The preliminary equipment of ships, the purchase of supplies and merchandise, the acquisition of land, the building of forts, and the supply of weapons and military material; the payment of a military force to protect their commerce against natives or interloping Europeans; the expenses, in many cases, of transporting colonists, and finally the long waiting before returns could be reasonably hoped for—some or all of these expenses were inseparable from the whole plan of establishing distant trade. It was no wonder that individual traders gave place to great unions of the merchants of London, Amsterdam, or Dieppe, who risked part of their means and united their resources to form companies to trade with the East and West Indies, Africa, and other outlying parts of the world."

The companies that undertook to plant colonies in distant frontier sections of the world and to build up a trade between those regions and the home country were necessarily granted large political and administrative powers, because they could not otherwise hope to accomplish the economic objects for which they existed. The home government was unable to protect the lives and the property of the "adventurers" and to maintain order in the distant wilds of America or in far-away India; hence they intrusted the companies with political powers.

In chartering and supporting commercial companies each country was seeking to strengthen itself in its unavoidable competitive struggles with other countries. It was to spread its dominion over a wider territory, to establish a favorable military or naval base, to insure a favorable balance of trade or to outdo a rival in some one of many ways—these objects in part or as a whole led to the chartering of the commercial companies.

The companies chartered to colonize America and develop trade with that part of the world were bodies whose chief objects were commercial. They sought dividends, first of all; the planting of colonies and the consequent spread of the civilization and religion of their country was a secondary, but not by any means an ignored, consideration. They failed in their main purpose, and as time went on they

---

[1]*European Background of American History*, 161.

became more distinctly colonizing and political organizations. They accomplished a larger and higher task than they had set about to do, and wrought more wisely than they knew.

The contribution of the chartered companies to the early development of American commerce may be summarized under four heads: (1) They brought about the settlement of the country. Without their aid the colonization of America must needs have come much later. (2) In planting their colonies and in furnishing them with the supplies required during the early years of trial the companies organized voyages to and fro between Europe and America. Their experiences in these trips and the results of those early years of trafficking paved the way for the individual traders that succeeded the companies. (3) The companies first placed the natural products of America, the furs, timber, tobacco, etc., upon the markets of the Old World. The demand for American produce was thus created and made more definite, and when the individual merchant began to trade he knew, in part at least, what commodities could be readily sold at home. (4) Similarly the trader was better informed as to the requirements of the settlers in the wilds of America than the companies had been when they sent out their colonies. He could better judge of the American market.

THE LONDON COMPANY AND EARLY TRADE WITH VIRGINIA.

The London Company, under the official title of "The Treasurer and Company of Adventurers and Planters of the City of London for the First Colony of Virginia," secured its charter in 1606,[1] the year before it planted the colony at Jamestown. The company was granted the right to establish a plantation at any point on the Virginia coast between the thirty-fourth and forty-first parallels of north latitude; while at the same time the Plymouth Company (the history of which will be given later) was given the right to plant a settlement anywhere between the thirty-eighth and forty-fifth parallels. To prevent the possibility of a conflict of jurisdiction within that territory, in which both companies were permitted to settle, namely, that lying between 38° and 41°, it was provided "that the plantation and habitation of such of the said colonies as shall last plant themselves, as aforesaid shall not be made within one hundred like English miles of the other of them, that first began to make their plantation." Each colony was to have the exclusive possession of the land and all its resources within a region extending for a distance of 100 miles along the coast, 50 miles north and south of its first plantation, and 100 miles inland, as well as the possession of all islands situated within 100 miles of the land, in that part

[1] The charter of 1606 is printed in full in Stith, *History of Virginia*, I; also in Brown, *Genesis of the United States*. The charter of 1609 is to be found in Stith, I, app. ii, and with some omissions in Brown, I, 208–237. The powers conferred by the charter of 1609 are summarized and discussed in Cheyney, *European Background of American History*, chap. viii; compare also the paper by H. L. Osgood on "The Colonial Corporation," in *Pol. Sci. Quar.*, XI, 1896, pp. 264–268.

of the sea lying "over against" the coast line to which the company became entitled, and no one was to be "permitted, or suffered to plant or inhabit behind, or on the backside" of the possessions of either colony, "without the express licence or consent of the council of that colony." By the charter of 1609, which replaced the original instrument, the membership of the London Company was greatly enlarged, and the territory granted was made to include a strip 400 miles wide, 200 miles north and south of Point Comfort. A third charter conferring some additional financial powers was granted in 1612.

By these charters, the London Company was required to take settlers to the territory granted; and, to enable it to profit thereby, the company was given a complete monopoly of trade until 1616; supplies sent from England to Virginia for the "support, equipment, or defense" of the colonists were, by the charter of 1606, to be free of export duties for seven years; the imports into Virginia were to be free for twenty years; and the duty on imports into England from Virginia was never to exceed 5 per cent. Trade with the natives was to be free of tax for seven years.

The experience of the London Company in organizing and carrying on the commerce of Virginia for a decade and a half makes an instructive chapter in the history of commerce. Although the company failed to make any profits for its adventuring members (they lost all their investments, indeed), the men who controlled its councils are entitled to great praise for the sacrifices they made of time and capital to plant and maintain in America an outpost of English civilization.

The charter of 1609 made it possible for all goods sent out to the colony to be dispatched by the company's supply ships, the funds required for the purchase of the ships and goods thus dispatched being obtained from individual members of the company who subscribed in their own names such sums as they cared to adventure. The goods were shipped as the property of the subscribers as a body, who were each to share in the profits of the venture in accordance with the amounts of their respective subscriptions; but there was to be no division of profits until 1616. When the goods thus sent reached the colony they were to be stored in the company's magazine and were to be distributed by an official called the Cape Merchant, who was also the treasurer of the colony. The second Cape Merchant was the famous Captain John Smith.

The first colonists were started over, in December 1606, in three small vessels that reached the James River in April 1607. Somewhat more than a year later two supply ships were dispatched, and in the autumn of 1608 yet other vessels were sent with supplies. It was expected by the adventurers that the goods thus shipped to Virginia would be exchanged for the products of the New World and that the articles brought to England would yield a profit to the investors.

As a matter of fact, the members of the company received no returns whatever. The colonists were in such straits that they had to be supported by the company for four or five years; indeed, had the company not sustained the colonists during those uncertain years the whole colonizing venture must have failed.

Possibly the subscriptions of the adventurers might not have been altogether lost had all the goods sent out by them reached the storehouse in Jamestown; but unfortunately both the agents of the company who were sent with the supplies and the sailors on the vessels, in spite of stringent laws to the contrary, appropriated a large part of the supplies and traded in them on their own account with the Indians and the colonists instead of depositing the goods in the magazine for distribution by the Cape Merchant.

In theory the two colonies planted in America in 1607 by the London and Plymouth Companies—one at Jamestown and the other at Sagadahoc at the mouth of the Kennebec River—were private commercial ventures of joint-stock companies. As Professor H. L. Osgood says:[1]

> "The colonies which were founded at Sagadahoc and Jamestown were both plantations, owned, officered, and managed by the proprietors or company. The colonists were servants of the company. They were freely transported to Virginia in its vessels, and there worked for the company under prescribed regulations. They were fed and housed out of the products of the total labor of the colony, supplemented by cargoes of provisions received from home. When, if ever, the colony became able to furnish a surplus product—lumber, furs, tobacco—it was sent home in the vessels of the company and sold for the benefit of the adventurers. A profit, supposedly large, was also made by the adventurers and officers of their vessels on European goods taken to the colony and sold. These, as well as supplies of provisions from England, were regularly stored in a magazine or storehouse under the charge of a Cape Merchant, whence they were delivered to the colonists."

The colonial officials "were more truly overseers and factors than governors, councilors, and judges."

The London Company did not meet with the commercial success it anticipated, and as the first trading venture had proved an entire loss, much difficulty was experienced in 1608 in securing funds for the second supply ships, and this caused the company to secure its second charter (1609) by which no less than 650 individuals and 56 city companies came together as a "company of private adventurers for the advancement of the plantation" in Virginia. By dint of heroic efforts, supply ships in increasing numbers were despatched annually during 1609, 1610, and 1611, no less than 10 vessels being sent in 1611; but the Virginia settlements were still struggling for existence, and returning vessels brought back no profits. The exports of Virginia were not of much value until the tobacco trade began. It was not until 1612 that the systematic cultivation of that plant was begun, and naturally a

---

[1] *The American Colonies in the Seventeenth Century*, I, 34.

few years thereafter must needs elapse before the tobacco exports could become of large volume.

The financial troubles of the company in 1612 were such that they then secured a new or amended charter authorizing them to raise funds by lotteries. By this device some funds were secured, and some cash was also obtained by lawsuits instituted against those members who had not paid in the amount of their subscriptions. But the capital thus derived went the way of the former investments; and when, in 1616, the time came to return to the subscribers the capital they had adventured and the accumulated profits thereon, there was nothing whatever to divide. However, the Virginia colony had now become securely established, and it seemed possible that a profitable trade might yet be carried on, if it could be rightly organized and managed.

The company decided to try a new kind of trade management, and there was formed "The Society of Particular Adventurers for Traffic with the People of Virginia in Joint Stock," *i. e.*, certain members of the company united as a joint-stock association to send out goods in the name of a magazine, the members of the group subscribing, individually in such amounts as they chose, to the magazine, which was to be administered in England by a director and five councilors. The company still reserved its right to trade as a company, but as a matter of fact did not engage in trade. No individuals outside of the members of the company were allowed to enter the commerce of Virginia. The monopoly principle was still adhered to; but the plan failed and greater freedom of trading became necessary.

The first step toward freedom of trading was taken in 1619, when persons not members of the company were permitted to ship cattle, grain, and munitions of war to Virginia. The following year the commerce of Virginia became free to any Englishman who chose to engage in it; indeed, the exclusion of the Dutch and other nationalties from the trade was theoretical rather than real.

Virginia came directly under the royal government in 1624, when Charles I annulled the charter of the London Company. This event, however, was of slight significance so far as the commercial development of the colony was concerned. The industrial progress of the colony had become assured; its trade was open to all, and was soon being carried on by such enterprising English merchants as John Preen of London, who, aided by two associates, got permission, in 1626, to carry goods, munitions, and passengers to Virginia, and was able to testify two years later that he had sent out supplies on four occasions.

While it would require too great space to describe the early commerce of each colony as fully as that of Virginia has been considered, a brief account of the beginnings of the trade of New England, and New Netherland, and a short reference to other colonies seems desirable.

THE PLYMOUTH COLONY AND ITS EARLY TRADE ORGANIZATION.

After its unsuccessful attempt to establish a colony at Sagadahoc at the mouth of the Kennebec River, in 1607–08, the Plymouth Company of Adventurers to North Virginia made no further serious efforts to establish plantations within its territory, and the first colony to be established in the region to which Captain John Smith, in 1614, gave the name New England, instead of North Virginia as it had previously been called, was that planted in 1620 at New Plymouth by the Pilgrims, who secured their patent from the London, and not from the Plymouth, Company. The business arrangement by which the colony was established was a partnership composed of the colonists and certain adventurers or capitalists in England. The shares were £10 each, and each colonist counted as one share; the adventurers supplied the funds to finance the expedition. All the earnings of the colonists during the first seven years were to belong to the partnership. At the end of the period the profits were to be divided. Meanwhile there was to be no private property.

When the Pilgrims obtained their patent from the London Company, they intended to locate within its grant, but New Plymouth, where they settled, was within the grant made to the Plymouth Company in 1606. Accordingly they applied for, and secured, a patent from that company, or rather from its successors; for, in November 1620, the Plymouth Company obtained new letters-patent from Charles I, and became the New England Council, or more precisely "The Council established at Plymouth, in the County of Devon, for the planting, ruling, ordering and governing New England in America." The colonists in New Plymouth, however, had few dealings with the New England Council; their business relations were with their partners in England, the adventurers, who were in reality their proprietors.

The plan of having all property at New Plymouth in common proved unworkable. The first homes were constructed and owned by their builders to whom lots for houses had been assigned. The food supply during 1621 and 1622 was so scarce that famine nearly swept away the struggling settlement, but conditions changed for the better in 1623, when the cornfields were allotted as individual holdings. In 1627 the tillable land and the domestic animals owned in common were divided among the colonists, and in 1633 the meadow lands were allotted; thus communal property came to an end.

Meanwhile the management of the Plymouth Colony's commerce had been revolutionized. During the early years the trade was monopolized by the English adventurers who were financing the colony. Their ships brought out the supplies and the new settlers and returned to England with clapboards and beaver skins. This trade monopoly soon grew irksome to the colonists, and at the end of the seven-year

term of their partnership contract, they bought out the claims of their partners in England.

The funds for the Pilgrims were provided by a group of merchant adventurers living in England, with an agreement that the venture was to be communal in its nature and a division of profits to be made at the end of seven years.

In 1628, the Plymouth settlers agreed to buy out the interest of the English adventurers for the sum of £1,800, payable in nine annual installments of £200 each. The same year eight men of Plymouth and four men in London assumed this debt of £1,800, together with the other debts of the colony, amounting to about £600, in return for which they received for a period of six years the monopoly of the trade of the colony.

According to Bradford, the English partners, with the connivance of Isaac Allerton, who was one of the Plymouth eight and the agent for the colony in its early business transactions in England, soon involved the colony in debts amounting to about £5,000, in addition to the sums yet due the original adventurers. Allerton was dismissed and the trading was carried on by Winslow and others.

When an attempt was made to settle the accounts between the London and the Plymouth groups, it was found that they were in such an involved condition that it was impossible to get a definite statement of affairs. After much trouble a compromise was reached, by the terms of which the Plymouth settlers agreed to pay the London partners about £1,200, in full settlement of their claims. The last of this sum was paid presumably in 1646.

The annual payments of the debt of £1,800 to the original adventurers were promptly met and this debt was cleared in 1636. The bonds were finally delivered to the colony about 1642, the year in which the compromise with the London partners was concluded.

THE MASSACHUSETTS BAY COLONY: ITS EARLY TRADE ORGANIZATION.

The Massachusetts Bay Colony secured its patent from the New England Council in 1628, and in the following year obtained a charter from Charles I, by whom the grant of territory was confirmed and full corporate rights and governmental powers were granted. The government of the colony, according to the patent of 1628, was to consist of a general court (*i. e.*, the company itself) in England, and by a court resident in the colony; but, most fortunately for the political future of America, the Massachusetts Bay Company (the general court) decided in October 1629, to transfer itself to the colony. Thus it was that Massachusetts Bay came to be a truly self-governing colony.

When the company, or general court, made the transfer from England to America it had debts amounting to £2,500, and it had need for £1,500 additional for immediate use. To secure the necessary funds,

the favored device of creating a trade monopoly was resorted to; although, as we shall presently note, the plan adopted did not accomplish what was intended by its authors. The capital required by the company was advanced by ten "undertakers," half of whom were to be of the adventurers in England and half to be planters residing in the colony. The governor of the company was chairman of the board. This Board of Undertakers, created in 1629, was to have the monopoly of four kinds of trade: (1) The fur trade, (2) the making of salt, (3) the transportation of passengers and commodities between England and the colony, and (4) the maintenance of a magazine in the colony from which goods were to be sold at fixed, or monopoly, rates of charges.

The attempt at monopoly failed, and private trading was the rule.[1] The fur trade was carried on by individuals or associations authorized and controlled by the general court; the salt industry was apparently not important enough to induce the undertakers to engage in it; and the retail trade of the colony never centered in the magazine. Indeed, there is no reference to the magazine after 1630. Winthrop's correspondence refers to a payment made to the undertakers for the ships in which the emigrants were brought to the colony in 1630, but to no other transactions with the board. The colony had trade dealings with the adventurers resident in England but not with the Board of Undertakers.[1]

As stated by Osgood:

> "By the close of 1630 the joint-stock, or purely commercial, element in the Massachusetts enterprise had practically disappeared. It was decided that henceforth the company should not directly engage in trade but should confine itself to regulating it. With the removal of the patentees into the colony, they began to devote themselves to the work of settlement and government. Trade continued and expanded, but it was in private hands, subject to the legislative and administrative control of the colonial government."[1]

Thus the early commerce of the Massachusetts Bay Colony differed in organization and management from that of both the Virginia and Plymouth colonies. In Virginia a trade monopoly was maintained by the London Company until 1620; in the case of Plymouth the adventurers or proprietors held control of commerce until 1627, when the colony organized itself into an association for the exclusive conduct of its trade for a period of years; whereas in the Massachusetts Bay Colony there was virtual freedom of trade after the first year. What was true at Massachusetts Bay was by no means characteristic of all the early settlements within New England. The numerous grants made by the Plymouth Company, the New England Council, Charles I, and their patentees to individuals and companies carried with them the power to establish private trade monopolies.

---

[1]Osgood, *American Colonies in the Seventeenth Century*, I, 150.

As a type of these early private companies having exclusive commercial privileges may be cited the Laconia Company, promoted by Gorges and Mason. It was organized in 1630 for trading and fishing, and two settlements were established within its grant on the Piscataqua River. At one of the settlements saw mills were erected and lumbering was carried on. Land was cleared to raise food; there was some stock raising and some fishing, and there was some potash made. The beaver trade was the most important industry. Ships operated by the company sailed back and forth between England and the settlements to bring out supplies and to take back the marketable products. The loss of a vessel in 1632 bankrupted the company and a year later the members of the company dissolved business relations and "the land and other property of the patentees was divided."

The experiment of the Laconia Company was an economic enterprise on a small scale, similar to that undertaken in a larger way by the London Company in Virginia. Fortunately for posterity, the men who supported the Virginia company changed their primarily economic project with great personal sacrifice into one whose chief aim became the colonization of a part of the New World and the development therein of British institutions.

NEW NETHERLAND AND ITS TRADE.

The commerce of New Netherland during the fifty years of the control of that colony by the Dutch was for much of the period monopolized by chartered companies. Shortly after the discovery of the Hudson River in 1609, individual trading expeditions to that valley were sent out from Holland, and by the autumn of 1614 it had become promising enough to cause certain merchants to unite in the "Amsterdam Company," which was granted a charter that gave it an exclusive monopoly, for four years, of the trade of New Netherland, a territory bounded, south and north, by the fortieth and forty-fifth parallels. This company did not attempt the settlement of the country, but merely maintained posts for carrying on the fur trade which centered at the lower end of Manhattan Island and at the present site of Albany.

In 1621, three years after the end of the period for which the Amsterdam Company was chartered, the Dutch West India Company came into existence under the official title of "The United Company of the United Netherlands,"[1] and received for a period of twenty-four years a monopoly of the government and trade of Africa and both sides of the American continents. It was authorized, and was expected, to devote its energies and capital to "the acquisition of wealth through the spoiling of the Spaniards,"[2] as well as to the development of com-

[1]Osgood, "The Colonial Corporation," in *Pol. Sci. Quar.*, XI, 1896, pp. 264–268; Jameson, *William Usselinx.* (Usselinx was the founder of the company.) Cheyney, *European Background of American History*, chap. viii (this summarizes the chief powers of the company).

[2]The quotation is from Channing, *History of the United States*, I, 445.

merce. To aid in accomplishing these objects the company received a state subsidy of 1,000,000 florins, the use of 16 government ships and 4 yachts, and was given the exemption of tolls and license dues on its own ships. The company was required to provide at least as many vessels of its own as it secured from the government, and whenever practicable the ships were to return to the home port from which they sailed. The Dutch West India Company sent out settlers to New Amsterdam in 1623, but the persons thus taken out were employes of the company rather than colonists in the usual meaning of the term at the present time. The company monopolized the entire economic life of the colony. The fur trade, which, during the early years, amounted to 60,000[1] guilders annually, was the all-important business; ship-building was successfully carried on to some extent; mills were set up for sawing logs, but there was little if any export of lumber. The ownership not only of the land, but of the stock upon the farms was retained by the company until 1629, when the patroon system of land-holding was introduced.

The private holding of land in patroonships constituted the first modification of the plan of complete monopolization of industry by the company, and this change was made, because the returns from the fur trade were not large enough to make it worth while for the company to bear the entire expense of developing the colonial enterprise. Accordingly, the company provided that any member who should within four years send out fifty families at his own expense would be granted a large tract of land (a patroonship) of his own selection. The purpose of the company was to create large landed estates—the best of which would naturally be secured by the individual members controlling the company at the time the system was adopted—cultivated by the patroon's tenants, assisted by slaves. The company was to sell the patroons such slaves as they might need to purchase; the profitable fur trade with the Indians was to be carried on only by the company and by those living within its reservation at Manhattan. The trade and industries of the patroonships were most carefully restricted and regulated with a view to perpetuating the company's commercial monopoly, and to keeping the colony dependent upon the home country for clothing and other supplies.

It is not surprising that the Dutch West India Company's dual system of patroonships and exclusive trade monopoly did not result in a rapid growth of New Netherland. It was found necessary to modify the land system and to open the commerce to competition.

To increase the number of small holdings of land and thus to bring about a greater cultivation of the soil, the company, in 1640, offered to grant patroonships of 200 acres each, the proprietor being required to bring out from the home country five servants to till the ground. As

---

[1] Channing, *History of the United States*, I, 447.

this plan did not have the full effect desired, the company tried the experiment, ten years later, of aiding the tenants by renting them stock and supplying them with tools; but the results of this modification of the patroon system, although favorable, were relatively slight. There were some exports of flour, oats, peas, and beans during Stuyvesant's administration (1647–1664), but the agricultural development of New Netherland was slow as compared with other colonies and continued to lag until after the country had been conquered by the English and settlements were made by immigrants who held the land as individual freeholds, as they were held in New England, Pennsylvania, and elsewhere.

The first inroad upon the company monopoly of the trade of New Netherland was made in 1638, when the company was compelled to grant to the merchants resident within the colony the right to import and export goods in the ships belonging to the company. This trade by private persons was subject to a duty of 10 per cent on imports, and 15 per cent on exports, and for three good reasons was most carefully regulated by the government: (1) The revenues for the maintenance of the government were derived from the commercial monopoly or from the customs collected from private traders. Private traders must be taxed, and smuggling must be prevented. (2) The opening of the trade to private merchants stimulated immigration and men of various nationalities made New Amsterdam their temporary abode, and the commerce of the colony passed to a large extent into the hands of persons who were practically foreigners and but slightly identified with the colony. (3) The most important branch of trade was in furs, which were secured from the Indians in exchange for trinkets, guns, powder, and rum. The government, *i. e.*, the company, could not safely permit its relations with the Indians to be determined by the unrestrained cupidity of private traders. Stringent regulation was necessary.

EARLY TRADE OF NEW JERSEY AND MARYLAND.

The commerce of the territory now included in New Jersey was not important prior to 1660. The Dutch made settlements across the Hudson from New Amsterdam as early as 1620, and regarded all the country east of the Delaware as a part of New Netherland. The Swedes, in 1638, made settlements on the east bank of the lower Delaware and considered that region a part of New Sweden, until they were dispossessed of their territory by Peter Stuyvesant in 1655. Thus the country between the Hudson and the Delaware was from the first divided by political and economic forces into two distinct sections; and the trade of the northern or eastern part centered at New Amsterdam, while the commerce of the southern or western portion was tributary to the lower Delaware.

The Swedes settled on both the east and west banks of the Delaware estuary, and New Sweden was held to include the region between the

Chesapeake and the lower Hudson. Professor C. M. Andrews summarizes the industries and trade of that section by saying:

"In that wide stretch of country between the Chesapeake and Hudson, the Swedes, Finns, and Dutch . . . led a flourishing agricultural and trading life. The Swedes . . . cultivated their gardens, orchards, and farms, and raised goats, cattle, and swine. They did a good business in tobacco (with Maryland) and furs (with the Indians), and continued their agricultural and trading life even after the subjection of the region by the Dutch."[1]

Maryland from the time of its colonization in the third decade to the end of the seventeenth century was engaged largely in raising tobacco, and, although it was less exclusively devoted to tobacco culture than Virginia was, the early foreign trade of Maryland consisted mainly in exporting tobacco to England to exchange for manufactures. The other important trade of the colony consisted in selling food and horses to the tobacco plantations of Virginia.

Inasmuch as the Carolinas were first settled in 1663, and Georgia seventy years later, the commercial history of those three colonies begins some time after the period covered by this chapter.

The foregoing discussion of the early commerce of the colonies has been concerned with their trade with their home countries in Europe. It remains to speak briefly of the beginnings of intercolonial trade. The main characteristics of that commerce can be depicted by reference to the intercolonial commerce carried on from New England and from Virginia, and to the commerce of those sections with the colonies in the West Indies.

BEGINNINGS OF INTERCOLONIAL TRADE.

By 1640 the intercolonial exchanges had become regular. According to Weeden, the trade of Massachusetts with New Amsterdam and Virginia began as early as 1631.[2] "After 1640, Boston, Salem, Scituate, Dorchester, Gloucester, Plymouth, Newport, New London, and New Haven" built vessels and dispatched them "loaded with produce and lumber, to adjacent colonies, Barbados and England."[3] The vessels were often sold with the cargoes. New England's earliest exports were furs, to which fish were soon added. Then lumber, grain, cattle, and butter were included, and the coastwise commerce of New England which reached New Amsterdam in the early thirties was in a few years carried on regularly with Virginia and the West Indies. The trade of Massachusetts with the Dutch at the mouth of the Hudson became large enough by 1642 to cause Massachusetts to enact legislation regulating the currency of Dutch coin. "By 1643, the trade (of New England) extended to Madeira, and soon after to Spain, and wine, iron, and wool were (thereby) included among the imports."[4]

[1] *Colonial Self-Government*, 319. [2] *Economic and Social History of New England*, I, 124.
[3] Andrews, *Colonial Self-Government*, 331.
[4] Doyle, *History of English Colonies in America*, III, 28.

The West Indies trade of New England early became more important than the commerce with the other continental colonies; indeed, it was the commerce with the West Indies that enabled New England to develop industrially and to expand her trade with Europe. The fish, pipe-staves, lumber, grain, pork, and other food products were sent to the tropical islands and there exchanged for cotton, tobacco, salt, rum, wine, sugar, negroes, and also for the coin and bills of exchange which New England needed to use in paying for the manufactures of old England. From the very first intercourse of New England with the West Indies, fish were marketed in the islands; and the early importance of the lumber exports is indicated by the fact that in 1640 eleven ships sailed from New England for the West Indies with cargoes of lumber.

These details give an indication of the commercial relations of New England with her sister colonies and with the West Indies. A brief survey of the intercolonial trade of Virginia will add further definiteness to the picture of the trade of the colonies with each other.

The trade of Virginia with New England, which had become regular by 1640, grew increasingly active thereafter, Virginia purchasing in New England not only colonial products, but also "a large quantity of supplies which had originally come from Europe,"[1] which the Virginians paid for by tobacco and by bills of exchange on England.

Commercial intercourse between Virginia and New Amsterdam and of Virginia with Europe via the Dutch colony was encouraged by the governors of New Netherland and by the Dutch West India Company. The importance of this trade was such that the Dutch West India Company was careful to maintain friendly commercial intercourse between New Netherland and Virginia even during the war between Holland and England from 1652 to 1655.[2] Exports from Holland and from New Amsterdam were taken to Virginia in Dutch ships which loaded with Virginia tobacco and sailed directly to Holland. The traffic from Virginia to New Amsterdam was light. Vessels northbound from the West Indies for New Netherland or New England sometimes stopped at Virginia to exchange tropical products for the tobacco and other exports of that colony. Thus the commerce of Virginia with the northern colonies was closely connected with her European and West Indian trade.

The most active intercolonial trade of Virginia was naturally with Maryland, her neighbor on the north, with which she had easy communication by way of Chesapeake Bay, the Potomac River, and the other streams debouching into the bay. Bruce states that, "As early as 1641 the records [of Maryland] show that its inhabitants purchased many of their supplies in the older communities south of the Potomac, and, on the other hand, that citizens [of Virginia] were obtaining goods of different sorts from persons living in Maryland."[1]

---

[1] Bruce, *Economic Hist. of Va. in the Seventeenth Century*, II, 322. [2] *Ibid.*, 314.

Commerce between Virginia and the West Indies began in 1633. The planters of Virginia, unlike the merchants of New England, were not largely engaged in operating ships. The owners of the most extensive plantations exported their tobacco in their own ships, but the intercolonial, West Indian, and some of the European commerce of Virginia was carried on in vessels owned outside of the colony, by the shipping of Holland, England, and New England. As regards the trade with the West Indies, it was carried on not only by means of the vessels owned in Virginia, and plying back and forth between the home ports and those of the tropical islands, but also by various traders that brought up West Indian cargoes as mercantile ventures. "Many ships," says Bruce, "from year to year arrived in Virginia with cargoes of West Indian commodities, the owners of which depended on casual purchasers for the disposal of their stock, these purchasers being sought by passing from landing to landing in the principal rivers."[1]

GENERAL SURVEY OF AMERICAN COMMERCE IN 1660.

The difficulties to be overcome in the settlement and colonization of America were many, and the increase in population was comparatively slow during the first fifty years after the founding of Jamestown. The English colonies, New England, Maryland, and Virginia, contained from 75,000 to 80,000 white inhabitants and New Netherland's population added 6,000 or 7,000[2] more. The total commerce carried on by these 80,000 or 85,000 people could not have been large in comparison with the later figures of American trade; nevertheless the colonies scattered along the seaboard from the Kennebec to the valley of the James were so closely dependent upon maritime commerce that a large share of their economic activity was devoted to trade.

The English colonies far outweighed the Dutch in importance, and the major share of their total commerce was with England; although, up to the passage of the British Acts of Trade in 1660, Holland not only had the trade of New Netherland, but also secured a large, though minor, portion of the tobacco exports of Maryland and Virginia.

The several colonies were not vitally dependent upon each other. Their economic connections were mainly with Europe, and the intercolonial trade was relatively small in scope and volume. The exports of all colonies being agricultural and forest products, and in the case of New England those commodities and fish, the most natural markets of the colonies as a whole were in Europe, and it was there also that they could most advantageously secure the greater part of their manufactures and other necessary supplies. New England, however, afforded a partial exception to this general rule, in that she early found a large and profitable market in the West Indies.

[1] *Economic Hist. of Va. in the Seventeenth Century*, II, 327.
[2] Channing, *History of the United States*, I, 510.

The trade between New England and the West Indies developed early, because it formed the natural complement to her commerce with Europe. The exports of New England to the tropical islands, lumber, fish, etc., exceeded in value the purchases she made in the West Indies; whereas the supplies New England required from England greatly outvalued the exports that could be marketed in the home country. The bills of exchange which New England obtained from the West Indian importers enabled her to settle her commercial indebtedness to England. The steady economic progress of New England was made possible by the profitableness of her commerce with the West Indies.

Virginia had a larger foreign trade than any of the New England colonies had and it was of very different character. Unlike New England, Virginia had only a minor interest in the West Indies. Her chief staple, tobacco, had its sole outlet in the European markets, and the progress of Virginia was conditioned almost entirely by her commerce with England and Holland. Up to 1661 the tobacco trade, and hence the import trade, of Virginia was shared by Holland as well as England; and the growing commerce of Holland with the British colonies in America was the occasion, if not the cause, of the enactment of the British Navigation Acts restricting the trade of the British colonies to ships of the national flag. The commerce of Virginia was larger than that of the other colonies, because she exported nearly all of her staple articles of production, and manufactured or produced but few of the supplies needed on her plantations. She even imported a part of her food supply and was more economically dependent upon Europe as time went on, whereas New England tended to become commercially autonomous.

The progress of the several colonies in industry and commerce was in no small measure affected by political and social forces as well as by economic or material causes. The advance of New Netherland under the political and social institutions maintained by the Dutch was slow, while the progress of New England with far less favoring natural conditions was comparatively rapid. New England led all the colonies industrially and commercially, because she had political freedom in the highest degree, and because her settlers were men inured to struggle and were so fashioned in mind and heart as to

> " . . . welcome each rebuff
> Which turns earth's smoothness rough."

CHAPTER III.

THE COMMERCIAL POLICY OF ENGLAND TOWARD THE AMERICAN COLONIES: THE ACTS OF TRADE.

The mercantile theory, 35. Origin of the Navigation Acts, 37. The Navigation and Trade Acts of 1651, 1660, and 1663, 39. The Administrative Acts of 1673 and 1696, 42. The Molasses Act of 1733, 42. British regulation of colonial manufactures, 44. English bounties, preferential duties, drawbacks, and other encouragements to colonial industries and trade, 46. The Grenville, Townshend, and North Acts, 1764–1770, 48. Effects of the British commercial policy upon colonial industry, commerce, and manufactures, 49. The illegal trade of the colonists, 51. Summary of the effects of the Acts of Trade, 52.

Before continuing with the history of the development of American commerce after 1660, it will be well to consider the policy adopted by England and the measures enacted by the several American colonies for the promotion and regulation of commerce. The present chapter will discusss the British Acts of Trade; the following one will summarily review the commercial policy of the colonies.

THE MERCANTILE THEORY.

During the seventeenth century, and indeed from the fifteenth until well into the nineteenth century, the mercantile theory of trade was accepted without question by practically all Englishmen, and in fact by Europe generally. The nation was by this theory regarded as a political and economic unit. Each country's relations with all other countries were to be carefully regulated so that all international intercourse might enhance national wealth and power.

Under the mercantile theory it was held that if trade were to be of advantage to the country as a whole the following principles must be observed:

(1) Trade must be so conducted that the money value of the commodities exported from the country exceeds the money cost of the goods imported, so that there is a "favorable balance of trade" with a steady flow of coin or bullion into the country. It was believed that the military and naval strength of a country depended upon the stock of ready money in the war chest or at least in the possession of the people of the country.

(2) It seemed equally evident to the people of the times of Elizabeth and Cromwell that certain kinds of trade were much more to be desired than others, and that it was the business of the government to restrict or prohibit some exchanges and to foster others. The imports ought not to compete with, but ought to contribute to, the growth of home industries; the exports should not include those articles needed at home for consumption or use in production.

(3) Under the fully developed mercantile system, it was held that the merchants of other countries should be permitted to engage in the

commerce of the home country and its colonies only to the extent that the producers and traders of the home nation were unable or disinclined to carry on and develop industry and commerce. Each foreign country ought to be permitted of right to engage in its own trade with another country, but each nation might, if it choose, reserve to itself all the commerce between the different sections under its flag, and might refuse to open its trade with a foreign country to the merchants and ships of a third nation. These restrictions of trade were made to promote the industries, increase the shipping, and strengthen the naval power of the country.

(4) The commerce of a country ought, as far as possible, to be reserved to the ships of the national flag, owned and manned by the people of the country. This policy was believed to be wise, both economically and politically. The maritime commerce and the merchant marine ought to contribute to the naval power of the country. Even if foreigners were able to handle the maritime trade more cheaply, they ought not to be allowed to do so; the naval power should be strengthened, even though a temporary economic sacrifice were necessary.

(5) The reservation of the trade of the colonies to the home merchants and to the national and colonial shipping seemed most natural. The colonies were regarded as plantations, established and fostered to provide the people of the parent country with a vent for their manufactures and with new and controllable sources from which to secure the foods and materials needed to supplement the supplies required by the mother country; and the colonists were encouraged, sometimes with bounties, to produce the imports required by the parent country.

The policy of England was to increase and perpetuate the economic dependence of the colonies upon the mother country. The plantations were to be supplied with all their manufactures from Great Britain, and the home country was to be, with few exceptions, the sole market of the productions of the plantations. England was to be the "staple" of the trade of the colonies. As Malachy Postlethwayt, the author of the voluminous *Dictionary of Commerce*, stated in a volume entitled *Britain's Commercial Interest Explained* (vol. I, pp. 107–108), published in 1747·

"Colonies ought never to forget what they owe to their mother country in return for the prosperity and riches they enjoy. Their gratitude in that respect, and the duty they owe, indispensably oblige them to be immediately dependant on their original parent, and to make their interest subservient thereunto. The effect of that interest, and of that dependency will be, to procure the mother: (1) a greater consumption of productions of her lands; (2) occupation for a greater number of the manufacturers, artizans, fishermen, and seamen; (3) a greater quantity of such commodities as she wants; (4) a greater superfluity wherewith to supply other people.

"From the end of the establishment of colonies, result two kinds of prohibitions. First, it is a law founded on the very nature of colonies, that they ought to have no culture or arts, wherein to rival the arts and culture of their parent country. For which reason, a colony, incapable of producing any other com-

modities than those produced by its mother country, would be more dangerous than useful; it would be proper to call home its inhabitants and give it up.

"Secondly, colonies can not in justice consume foreign commodities, with an equivalent for which their mother country consents to supply them; nor sell to foreigners, such of their own commodities as their mother country consents to receive. Every infringement of these laws is a real, though too common, robbery of the mother country's labourers, workmen and seamen, in order to enrich the same classes of men belonging to rival nations, who will sooner or later take advantage of it against those very colonies . . . .

"From these principles it follows, that colonies are designed for culture only, and that the navigation occasioned by that culture belongs to the seamen of the mother country."

Such was the "mercantile doctrine" as regards the desirable economic relation of colonies to the parent country. "The only use and advantage of the American colonies, or the West India Islands," said Lord Sheffield, "(is) the monopoly of their consumption, and the carriage of their produce; for that object alone we could be tempted to support the vast expense of their maintenance and protection."[1]

The establishment of transoceanic colonies at the opening of the seventeenth century gave a new and wider significance to the mercantile theory. Up to that time the motive back of the doctrine had been national, the aim and ideal now became both national and imperialistic, and as England was the leading and most successful country in planting permanent colonies of her own subjects, her navigation laws and acts of trade express the mercantile theory in its clearest and most logical form.

The commercial policy of England during the seventeenth and eighteenth centuries has been so fully and ably discussed by Mr. George L. Beer,[2] and the Acts of Trade by which that policy was carried out have been so clearly analyzed by Professor Herbert L. Osgood,[3] that it will be necessary, in this history of American commerce, only briefly to summarize the main features of that legislation, and to point out its principal effects upon the trade and industries of the British colonies on the continent of America.

ORIGIN OF THE NAVIGATION ACTS.

Some of the principles of the mercantile legislation of England antedated by many years the settlement of America. An act passed in 1381, when Richard II was King, provided "that, to increase the navy of England, no goods or merchandises shall be either exported or imported, but only in ships belonging to the King's subjects.[4] The

[1] *Observations on the Commerce of the American States*, 162.

[2] *Commercial Policy of England toward the American Colonies* (Studies in Hist., Econ., and Public Law, Columbia College, Vol. III, 1893, No. 2); *British Colonial Policy, 1754–1765; The Origins of the British Colonial System, 1578–1660; The Old Colonial System, 1660–1754.* Part I, 1660–1688. 2 vols.

[3] *American Colonies in the Seventeenth Century*, III, chap. vii.

[4] Chalmers, *Political Annals*, I, 257.

patent that Henry VII granted to the Cabots, near the close of the fifteenth century, stipulated that the commerce resulting from their discoveries must be with England. These and similar rules concerning trade were probably not enforced to much extent and they probably had comparatively slight effect; but the requirements which Richard and Henry imposed illustrate the theory held at that time by the people of England regarding the governmental control of maritime commerce.

The principles embodied in the Navigation and Trade Acts of 1650, 1651, and 1660, and of later dates, had certain immediate precedents in the provisions of the charters granted to the London and Plymouth Companies, in the various royal patents bestowed by the Charleses, and in the early regulations concerning the tobacco trade. The companies that made the first settlements in America were given the exclusive monopoly of the trade with their colonies, which meant that the commerce as it developed was to be with England. The purpose of the Crown to reserve to England the future commerce with America was well shown in the patent granted by Charles I to Berkeley in 1639, by which the patentee was "to oblige the masters of vessels, freighted with productions of the colony, to give bond before their departure to bring same into England . . . . and to forbid all trade with foreign vessels, except upon necessity."[1]

The first valuable import from the American settlements was tobacco, and as there was a strong demand for this in the Netherlands and elsewhere on the continent, England had much difficulty in monopolizing the market. Partly because the use of tobacco was thought to be undesirable but more for the purpose of deriving a revenue from the tobacco trade, the English government, in 1619, prohibited the growing of tobacco in England for sale; and the next year a monopoly of the right of importing tobacco into England and collecting the duties thereon was granted to two men for a year for £10,000. The London Company then arranged to dispose of the Virginia tobacco in the Netherlands, but in 1621, despite the pleas of the company for the privilege of freedom of trade, the Privy Council forbade the export of any product of Virginia to a foreign country until the commodities had been landed in England and had paid the English duties. This order was repeated from time to time, and the policy of the government did not change when the London Company was dissolved in 1624. However, as the quantity of tobacco grown in Virginia rose and the price fell, the incentive to evade the orders of the home government became so strong that not a little trade was carried on directly with the Netherlands, and indirectly by way of the Dutch merchants at New Amsterdam.

[1]Chalmers, *Political Annals*, I, 120.

During the stormy years of the Civil War preceding the period of the Protectorate in England there was no effort made to prevent the colonists from trading with the Dutch; hence it was that when order was established by the strong rule of Cromwell, a large share of the trade of the British colonies was handled by Dutch merchants and carried by Dutch ships. This was irritating to the English merchants; and when, in 1650, the Rump Parliament passed the act to compel rebellious Virginia, whose sympathies were with the Loyalists, to accept the authority of Parliament, the act included a clause (inserted as a war measure, it is true) prohibiting the ships of all foreign nations from participating in the trade of the English colonies, except under license from Parliament or the Council of State. The act was in general terms and included all countries, but was aimed at the Dutch. It was a temporary war measure hastily enacted, but it was superseded the following year by a carefully prepared navigation act.

THE NAVIGATION AND TRADE ACTS.

The Navigation Act of 1651 was enacted to exclude foreign ships from carrying the commerce between England and her colonies, and to require all foreigners to employ their own or British ships in shipping exports to England or its dominions. The act applied solely to navigation or the carrying of traffic and was intended primarily to cripple the Dutch; it did not give Englishmen a monopoly of English and colonial trade. Its chief provisions were:

1. That goods grown or manufactured in Asia, Africa, or America could be brought into England or its dominions only in ships of which the proprietor, master, and the majority of the mariners were English.
2. That goods grown or manufactured in Europe could be imported into England or its dominions only in English ships or vessels belonging to the country where the goods were produced.
3. That goods of foreign growth or manufacture could be brought into England only from the place of production or from "those ports where alone the goods can be shipped or whence they are usually first shipped."[1]

The act contained certain minor exceptions to its provisions. The forfeiture of cargo and vessel was the penalty for violation of the law. The extent to which the law was enforced and its effect on British shipping will be considered below. One consequence of the law was immediate. The act was intended to cripple the Netherlands, and it succeeded. War with that country followed the succeeding year, and the great naval struggle between England and Holland began—a conflict by which England, before the close of the seventeenth century, came to be the leading maritime country of Europe.

The act of 1651 applied only to shipping, or the ocean carrying business; the next and the most important piece of commercial legis-

[1] Beer. *Commercial Policy of England*, 31.

lation, that of 1660, related to ship-building, to navigation, and to trade. Its provisions regarding the construction and ownership of the ships employed in the British colonial commerce and in the import trade of England were:

1. That goods could be imported into or exported from the British plantations in Asia, Africa, or America only in vessels owned and built by the people of the realm (England, Wales, Berwick on Tweed), Ireland, and the English plantations. The master of the ship and three-fourths of the crew must be English.[1]

2. That the productions or manufactures of Asia, Africa, or America could be imported into the realm, Ireland, Jersey, and Guernsey, only in vessels built, owned, and operated as described above.

3. That articles of foreign production could be imported into the realm, Ireland, Jersey, and Guernsey, only directly from the countries where they were produced or from the usual places of shipment.

The act of 1660 so regulated the colonial trade as to give English merchants a great advantage over those of the Netherlands and other foreign countries. It provided that no alien should be a merchant or factor in the British colonies, and it enumerated seven colonial products (sugar, tobacco, raw cotton, ginger, indigo, and fustic and other dye woods) that could not be shipped from any plantation to any country or place except to another plantation or to the English realm. This list of enumerated articles was somewhat lengthened in 1706 and 1722, molasses, rice, and naval stores being added in 1706; copper, beaver, and other skins, in 1722.

In 1764, as one feature of Grenville's measures for taxing the American colonies, numerous additions were made to the list of enumerated articles, coffee, pimento, cocoanuts, whalefins, raw silk, hides and skins, pot and pearl ashes, iron, and lumber. Two years later, to prevent the colonists from buying manufactures from the continent of Europe, the final and drastic step was taken of requiring the non-enumerated (as well as the enumerated ones) to be shipped to England, or Ireland, or to some country south of Cape Finisterre.

Until after the end of the seventeenth century tobacco was the only enumerated commodity included in the export trade of the continental American colonies. Accordingly, the monopolization by the mother country of the market for the exported enumerated articles did not immediately affect the trade of the colonies north of Maryland. The grain, fish, naval stores, furs, etc., exported by those thriving colonies had an unrestricted market until the eighteenth century, when the naval stores, copper, and furs were enumerated. Moreover, when

[1]The word "English" as used in this law was intended to include the people of the colonies as well as those of England. The act of 1662 (14 Car. II. c. 11, sec. 5) removed all doubt on this question by stipulating that "Whereas it is required by the said Act (of 1660) that in sundry cases the Master and three-fourths of the Mariners are to be English, it is to be understood that any of His Majesty's Subjects of England, Ireland, and His Plantations are to be accounted English and no others."

naval stores were enumerated they were granted an export bounty to encourage their shipment to England.

To prevent the enumerated articles from being shipped direct from the colonies to foreign countries the act of 1660 provided that the master of a ship must, before sailing from a colonial port with any of the enumerated commodities on board, give a bond, with one surety—the bond being £1,000 for ships of less than 100 tons burden, and £2,000 if of greater burden—that the goods would be landed in England, Ireland, Wales, or Berwick. No restrictions were placed at this time upon the intercolonial trade.

To supplement the trade regulation provided for in the act of 1660 the statute of 1663 was enacted. The administrative features of the act of 1660 were strengthened by more stringent provisions regarding the filing of the bond to land the goods in the realm, and the declaration of the place of construction and of the ownership of the vessel. Disobedience of the law by the merchant or master was punishable by forfeiture of vessel and cargo. If the governor of a colony failed to enforce the act he was subject to removal and to a fine of £1,000. The English customs officers were, likewise, required under heavy penalties to enforce the law. The law stipulated that the productions of Europe could be exported to the British colonies only when laden and shipped in England, Wales, or Berwick on Tweed, and that the ships used to export the goods to the colonies must be built, owned, and manned by British subjects according to the act of 1660. An exception was made of salt, which might be sent from any European port direct to New England.[1] Wines might be shipped directly from Madeira and the Azores. The act of 1663 was intended to compel the colonists to buy all their imports from the merchants of England and Wales.

The law was not, as we shall presently see, capable of complete enforcement; but had it been strictly executed the influence upon the American colonies could hardly have greatly modified the course of the colonial import trade, because England was the chief producer of the manufactures desired by the American colonist. Moreover, the small quantities of continental wares purchased by the colonists would probably have been secured mainly at London—the chief trade center of Europe where most of the imports for America were obtained—instead of being bought directly from the continental exporters.

It will have been noted that the acts of 1651 and 1660 did not include Scotland, which until 1707 had its separate government. Until 1707, the people of England, Wales, Berwick on Tweed, Ireland, and the colonists were English according to the Acts of Trade, but the Scotchmen were not. The exclusion of Scotland from the direct trade with the colonies was objected to both by the merchants of Scotland and by the sugar planters of the Barbados, but without avail. There were

[1] Pennsylvania got the same privilege by 13 Geo.I, chap. 5; and New York by 3 Geo. II, chap. 12.

a few instances of Scotch ships being licensed to engage in the colonial trade, but Scotland was treated as a foreign country until the Act of Union of 1707.

The act of 1660 had imposed no restraints upon the shipment of commodities from one colony to another. The Virginia and Maryland planters took advantage of this to engage in an indirect export of tobacco to the Netherlands, by shipping the tobacco to New Amsterdam (until New Netherland was taken over by the English) and to New England, whence the tobacco could readily be taken direct to the Continent. The law was also more directly violated by transferring the tobacco from colonial to Dutch ships at sea. The colonial vessels that took the tobacco to the Continent would not care to return to America empty, nor would they be safe in seeking cargo in England; accordingly there were strong reasons for taking Dutch and other continental goods back for sale in the colonies. This illegal trading was carried on more or less regularly; but, as will be pointed out later, it probably did not constitute a large share of the total trade of the colonies.

To make the acts of 1660 and 1663 effective a law was enacted in 1673 providing that every vessel loading outbound from the colonies with enumerated articles, either must give a bond that those commodities would be landed in England, Wales, or Berwick (Ireland was not included), or must pay specific export duties. In other words, the intercolonial trade in the enumerated commodities must be carried on by way of England or be subject to export duties—at least this was the probable intention of Parliament. The ambiguous phraseology used gave a chance for diverse interpretations of its meaning. The Commissioners of the Customs in London were authorized to enforce this act, and they were empowered to appoint collectors of customs resident in the colonies to supervise not only the collection of the duties, but the granting of bonds and also the registry of vessels as required in the acts of 1660 and 1663. The London Commissioners appointed five collectors, one for each of the colonies of Virginia, Maryland, the Carolinas, New York, and Massachusetts.

Administrative problems were not solved by the act of 1673, and evasions of the law continued. Neither the Royal Governor of Virginia nor the colonial authorities of New England were disposed to enforce laws enacted to give the English merchants a monopoly of the over-sea and intercolonial trade in the "enumerated" articles of colonial export, and make England the exclusive market, or "staple," from which colonial imports might be obtained. In 1676, twenty-eight English merchants united in a formal complaint, and shortly thereafter the mercers and silk weavers of London made a protest, both alleging that New England had taken the place of England as the mart through which much of the tobacco exports and the imports of the several colo-

nies were being handled. It seems certain that the colonists were disposed to evade paying the export duties on enumerated articles shipped to a colonial port. If they paid the duty, they then felt that the commodities might rightfully be shipped from the intermediate colonial port direct to any foreign country.

An investigation of the working of the act of 1673, made by the Lords of Trade of the Privy Council, convinced them that the statute was ambiguous as regards the payment of duties, and the attorney-general was asked for an interpretation of the law. He interpreted the statute to require that in the case of the shipment of enumerated articles to another colony duties must be paid and bond also given that the goods were to be delivered either in England or in an English plantation. This meaning of the act of 1673 was adopted by the English Government and was written into the statute of 1696.

The act of 1696 was an administrative measure establishing machinery for the stricter enforcement of the previous acts, not only by means of executive officers but also through the aid of admiralty courts established for the purpose. During the reigns of William and Mary and of Queen Anne and the early years of George I attempts were made to give as much validity as possible to the act of 1696; but during the long period of Walpole's premiership, preceding the Seven Years' War, there was little done to execute the trade laws. Walpole placed the administration of the colonies in charge of the Duke of Newcastle, who treated the colonies with "salutary neglect."

The most drastic of British Acts of Trade was the Molasses Act of 1733, which "for the better securing and encouraging the trade of his Majesty's sugar colonies in America" placed duties so high as to be prohibitive of trade upon the rum, molasses, and sugar imported into the British colonies from the French, Dutch, Spanish, or Danish West Indies. The New England and middle colonies had found a large market in these non-British West Indian Islands for fish, flour, biscuits, lumber, cattle, and horses. These commodities were exchanged for sugar, which could be bought more cheaply in these foreign than in the British islands, and for molasses, of which the British islands could furnish only an inadequate supply. In addition to selling their own products the French and Dutch colonists also supplied the traders from New England, New York, and Pennsylvania with some manufactures from continental Europe.

The only possible course for the American colonists to follow was to ignore the act of 1733. The corn laws of England, the small market there for fish, and the fact that the importation of salted provisions was prohibited by England compelled the northern and middle American colonies to engage extensively in the West Indian trade to secure the coin, the bills of exchange, and the commodities with which to pay for the manufactures and other supplies they were obliged to have from

England. The American colonies could not have supplied themselves with these manufactures by domestic industry even had the English Acts of Trade permitted them to engage freely in manufacturing, instead of prohibiting, as they did, most manufacturing in the colonies except for strictly local markets.

The Molasses Act was an economic and political blunder on the part of England. It was intended to aid the declining sugar industry of the British West Indies, but its purpose could not have been accomplished without destroying the prosperity of the far more important continental colonies. It was a political mistake to pass a law that necessarily made law-breakers of all the American colonists; it would have been an even greater mistake to have attempted to enforce the act; the attempt to do this after the French and Indian War was one of the causes of the Revolution.

Complementary to the legislation, just summarized, enacted to regulate the trade of Great Britain with her colonies and of the colonies with each other, were the laws granting bounties and drawbacks to increase the trade in certain commodities, and the acts restricting or prohibiting certain manufactures in the colonies.

BRITISH REGULATION OF COLONIAL MANUFACTURES.

That the colonists should have engaged as early as the end of the seventeenth century in manufacturing to such an extent as to cause England to enact prohibitory legislation is to be explained mainly by the laws enacted during the reign of Charles II, placing heavy duties on grain imported into England, prohibiting absolutely the importation of salted provisions, and levying heavier duties on whale oil and blubber when brought to England in colonial than when imported in English ships. These laws prevented the northern colonies from marketing profitably, if at all, the surplus products of agriculture and the fisheries in exchange for British manufactures.

The tobacco from Maryland and Virginia found a welcome market in England, as did the other productions of the other southern colonies. The inclusion of tobacco, and later rice, among the enumerated articles somewhat limited, but did not seriously affect the development of the southern colonies. Those colonies could readily exchange their staple exports for the manufactures of England, and the laws of England restricting colonial manufactures had but slight influence in the agricultural plantations south of Pennsylvania.

The economic situation in the northern colonies was different. While their natural industries were those of agriculture and the fisheries, their population was qualified by temperament and antecedent training for engaging in manufacturing. The rich stores of timber for masts and lumber encouraged ship-building, the raising of sheep for wool was easy, and there were at least fair supplies of iron ore. With

these social and economic conditions prevailing within the northern colonies, and with the European market for their agricultural and marine products restricted, they would have engaged in manufacturing to the extent that their limited capital would have permitted had they not been prevented by the laws of Parliament. Had there been no restrictions placed by England upon the domestic industries or foreign trade of the American colonies, they would have devoted themselves chiefly to the extractive industries, because their available capital could, with few exceptions, have thus been more profitably employed than in manufactures; but had the policy of *laissez faire* been followed by England the northern colonies would have gradually developed a limited number of manufactures.

There were three important laws passed to restrict manufactures. The first, enacted in 1699, provided that the manufactures of wool, yarn, or woolen cloth in the English plantations were not to be sold outside of the place where they were manufactured,[1] *i. e.*, the goods were not to be exported abroad, nor sent outside of the colony. The making of woolen yarns and fabrics in the colonies was a domestic industry carried on chiefly during the winter months when outside work was not possible.

The second kind of manufactures that was restricted by British legislation was hat-making. Beaver skins being readily and cheaply obtained from the Indians, the manufacture of beaver hats became an industry of minor importance in New England, New York, and Pennsylvania, and some hats were exported to the West Indies, Spain, and Portugal. This alarmed the Company of Feltmakers of England, and in 1731 Parliament was successfully petitioned by the company to prohibit the exportation, after 1732, of hats from the colonies to England, to a foreign country, or from one colony to another. Parliament further regulated the industry by requiring the hat-makers to serve an apprenticeship of seven years and by prohibiting a master from having more than two apprentices. The law was not strictly enforced, and the colonists continued to supply themselves with at least a part of their beaver hats. The coarser hats were imported from England.

The most important industry of the colonies legislated against by Great Britain was iron manufacturing. The making of pig and bar iron was begun in a small way in the colonies at an early date—1645 in Massachusetts—but such an industry could not rapidly develop in an unsettled country where the scanty supply of labor and capital was most profitably employed in agriculture and the fisheries; hence it was not until well into the eighteenth century that the iron manufactures of the colonies became of such importance as to cause Parliament to consider the enactment of restrictive legislation. Virginia, Mary-

[1] 10 and 11 William III, chap. 10, sec. xix.

land, and Pennsylvania began before 1730 to export pig iron in small quantities. In New York and New England the pig iron from their own furnaces was used at home, and bar and wrought iron were imported. Indeed, nails, tools, and other iron manufactures were imported into all the colonies.

As England was obliged to import iron in the eighteenth century, there was a difference of opinion as to the wisdom of interfering with the development of the industry in the colonies. It was conceded by all that the colonists should be encouraged in making and exporting pig iron; but the English iron interests were opposed to allowing the colonists to work up their crude iron into manufactures. The iron interests of England had their way only in part in the law which Parliament finally enacted in 1750. The act was a compromise measure that (1) permitted bar iron to be imported free of duty at London, and allowed pig iron to enter England at any port, (2) forbade the erection in the colonies of any mill for rolling or slitting iron, or any plating forge, and of any furnace for making steel. If such establishments were constructed they were to be abated as nuisances.

The passage of this act was followed by some increase in the exports of iron from the colonies to England, and in 1757, in response to numerous petitions, Parliament passed a law permitting bar iron to be brought into England, duty free, at any port, thus taking from London the monopoly it had under the act of 1750.

ENGLISH BOUNTIES, PREFERENTIAL DUTIES, DRAWBACKS AND OTHER ENCOURAGEMENTS TO COLONIAL INDUSTRIES AND TRADE.

In order to construct and operate the great number of ships required in British commerce, Great Britain needed large quantities of hemp, masts, lumber, tar, pitch, turpentine, and rosin. With the exception of lumber, Great Britain had to depend entirely upon foreign sources of supply, and most of the timber supply of England had been exhausted by the eighteenth century. These naval stores were purchased chiefly from Denmark, Norway, and Sweden, and as those countries did not purchase large quantities of English exports, the balance of trade was against England. To overcome this unfavorable balance of trade and also to free herself from dependence upon foreign countries for the materials necessary to maintain her navy, England decided, in the early years of the war of the Spanish Succession (1706), to grant bounties on naval stores exported from the colonies to England. The bounty on hemp was £6 per ton, on masts £1 per ton, on tar £4, on pitch £4, on rosin and turpentine £3. The exportation of lumber to England was encouraged somewhat later (1723) by placing timber of all kinds from the colonies on the free list. These bounties were maintained throughout the colonial period, with the exception that the amount of the bounty on tar, pitch, and turpentine was reduced in the second year of the reign of George II.

The exports of lumber from the colonies to England were not very large. Most of the trade remained with the Scandinavian countries, which were able to compete successfully against the American colonies. The results were different in the case of tar, pitch, turpentine, and rosin, which were produced very cheaply in the southern American colonies and were exported, particularly from the Carolinas, in such large quantities that as early as 1719 England began to have a surplus of these articles for reexportation.

The only other colonial product upon which Great Britain offered a bounty was indigo, an article that was secured mainly from France until after 1740, when the production of indigo was started in South Carolina. The success of the indigo industry in the Carolinas caused Parliament to pass an act in 1748 granting a bounty of 6d. per pound on indigo imported into England from the British colonies in America.

Certain other bounties of minor importance and of slight consequence were granted by English societies for fostering arts and manufactures, and several of the American colonies granted bounties to stimulate the production of various kinds of commodities. The bounties granted by the colonies will be discussed in the following chapter.

To increase the trade in, and incidentally the production of, several colonial commodities, England gave preferences in her import duties to numerous colonial products. While the general rule was that products from the colonies paid the same duties as commodities from foreign countries, exceptions were made regarding a number of the important colonial exports. Tobacco from America paid a lower duty at the English ports than did Spanish tobacco. Pig and bar iron were admitted duty free. Molasses paid no imposts after 1690. Whale fins and train oil were charged lower duty when brought to England in colonial vessels than when carried there by foreign ships. Indigo from the British colonies enjoyed a preferential duty, and after the beginning of the reign of George I it was exempted from all customs charges. Raw silk from the colonies was admitted without duty in 1750, and in 1751 pearl and pot ashes were granted the same privilege.

The export duties of England were so arranged as to encourage colonial productions in certain industries. Coal exported to the colonies paid less duty than when sent to foreign countries. Tea sent to the colonies was exempted from inland duties, and coffee grown in British plantations and brought to England might be reexported with the payment of lower duties than were placed upon coffee from foreign countries.

It was the leading principle of the British mercantile system to grant drawbacks in the case of the reexportation of imported commodities, the rule being to return to the exporter all but 2.5 per cent of the value of the commodity. To increase the production of certain

colonial commodities exceptions were made to this general rule. The drawback on colonial tobacco amounted to the entire duty. In the case of hemp no drawback was allowed on the raw product when re-exported to the colonies from England. The purpose of England was to compel the colonies to grow more hemp. Iron and ironwares, likewise, were granted no drawback when exported to British plantations. On the other hand, beaver skins were granted a drawback, but not so large as that given to other commodities.

The general effects of the system of drawbacks were greater in stimulating the export trade of England to the colonies than in increasing the colonial exports to England. Linens, for instance, imported from the Continent could be sold by British merchants in the colonies more cheaply than could English and Irish linens; and this must have been true, to a limited extent at least, of other articles of colonial import.

THE GRENVILLE, TOWNSHEND, AND NORTH ACTS, 1764-1770.

The foregoing survey of the British Acts of Trade includes the more important laws enacted for the purpose of applying the principles of the mercantile theory to the regulation of the trade and industries of the colonies. Most of these laws, with the exception of the navigation acts—those relating to shipping—were radically changed by the Grenville-Townshend measures adopted from 1764 to 1767, when the unwise and unsuccessful attempt was made to add parliamentary taxation to imperial monopolization of the trade and industries of the colonies. As Burke declared, this was "a new principle . . . with regard to the Colonies, by which the scheme of a regular plantation parliamentary revenue was adopted. . . . A revenue not substituted in the place of, but superadded to, a monopoly; which monopoly was enforced at the same time, with additional strictness, and the enforcement put into military hands."

The Grenville-Townshend acts were fiscal rather than commercial measures, and their enactment and attempted enforcement immediately interrupted or discouraged the trade of the colonies. These laws are to be regarded as the political measures that led to the American revolt rather than as a part of the commercial policy of Great Britain; and for this reason they require only brief mention in this connection.

Grenville's revenue act of 1764—the so-called Sugar Act—reduced the duties on colonial imports of foreign molasses, from prohibitory rates to a revenue basis, forbade the importation of foreign rum, retained the duty on foreign sugar, put duties on foreign indigo, coffee when not bought in Great Britain, wines direct from Madeira, Spanish and Portuguese wines from Great Britain, silks and other fabrics from Great Britain. What was of even more consequence, machinery for the enforcement of the law was set in motion. The list of "enumerated" articles was increased as was stated above, and the Stamp Act followed in 1765.

The opposition of the colonists to these laws was so strong that the British merchants lost their trade; and in 1766 the Sugar Act and the Stamp Act were repealed, and a law was passed imposing lower duties on the imports into the colonies. The revenues thereby obtainable did not seem to Parliament to be adequate, and in 1767 the Townshend acts were adopted, placing duties on glass, paper, painters' colors, red and white lead, and tea. Colonial opposition continued; the non-importation agreements of the colonists cut down the exports of goods from Great Britain; and in 1770 Parliament adopted Lord North's measure repealing all the duties imposed by the acts of 1767, except the tax on tea. The Boston "massacre" in 1770, the Boston Tea Party in 1773, and other significant events in the colonies, failed to convince the British ministry of their inability to administer unpopular tax laws in America by means of military forces and admiralty courts; and the colonies were allowed to enter upon their long and successful revolutionary struggle.

The final results of the Grenville, Townshend, and North acts for the taxation of the trade of the colonies were trade paralysis and political revolution. These measures belong to the period of transition from the colonial to the independent national existence of the British settlements in America rather than to the period of the development of the colonies under the guidance of the commercial legislation of the mother country. In studying the commerical and industrial effects of the British colonial policy attention may properly be confined to the legislation that preceded 1764.

EFFECTS OF THE BRITISH COMMERCIAL POLICY UPON COLONIAL INDUSTRY, COMMERCE, AND MANUFACTURES.

The laws for the restriction of the manufacture of woolen goods, hats, and iron products were successful, but the effects could scarcely have been important. The colonists could not have made woolens in competition with England either for export to Europe or for the intercolonial trade; nor would the manufacture of hats, if unrestricted, have had much development. The iron and steel industries were hampered; but as the regulative law of Great Britain was not enacted until 1750, it did not greatly affect the economic development of the colonies. The colonies south of Pennsylvania would, in any event, have exported their pig and bar iron, instead of working it up at home; New England used all her domestic production of iron and imported more from England. The iron industries of New York and New Jersey were not important in colonial times. Pennsylvania had a comparatively large output, but she exported but little crude iron, and regularly imported wrought iron and steel.

Drawbacks and preferential duties granted by Great Britain were a necessary part of the general system of giving British merchants a monopoly of the colonial trade; they made it possible for the colonists

to sell more of their commodities in Great Britain than the British required for their own consumption, and also permitted the colonists to secure, by way of England, the manufactures of the continent of Europe. The intention of the British statesmen was to make England the emporium of the export and import trade of the colonies, and to carry out that intention drawbacks and preferential duties were required.

The acts of 1651 and 1660 embodied the first important feature of England's policy towards her colonies. These laws, it will be recalled, had two distinct purposes: that of restricting the carriage of British and American commerce to ships owned by the people of Great Britain and the colonies, and that of securing to British merchants a monopoly of the larger part of the colonial trade.

The Navigation Acts—the laws applying to the ownership and operation of ships—were of unquestionable benefit to the colonies. In the New England and middle colonies the conditions were favorable to the development of the ship-building industry. The nearby fisheries and those off Newfoundland created a demand for ships and offered strong inducements to the colonists to engage in seafaring pursuits; the intercolonial and over-sea commerce of the colonies required the use of a relatively large tonnage of shipping, and the result was that the colonists north of Maryland engaged extensively in the building and operation of ships. Restriction of the colonial trade to ships under the British flag in no wise prevented the development of the colonies.

The Acts of 1660, 1663, 1673, and 1696, whereby Great Britain granted British merchants a monopoly of the larger part of the colonial trade, constituted the most significant feature of the commercial policy of Great Britain toward her American colonies. The effects of these laws were complex and it is difficult to measure or even approximately estimate the net results accomplished by the legislation.

In the first place it is somewhat difficult to determine the extent to which the laws were actually enforced and in what measure they were evaded. Postlethwayt,[1] writing in 1747, states that the colonists traded directly with Marseilles and Toulon, and that their ships returned directly from those ports with French and other European wares. He asserts that trade was also carried on with Holland, and he dwells at length upon the well-established fact that the Molasses Act of 1733 was practically disregarded. Lord Sheffield,[2] writing in 1784, stated:

"It is well known that from the first until some time after the year 1763, they [the colonists] uniformly did evade them [the Acts of Trade] whenever they found it to their interest to import the goods and manufactures of other countries with whom they traded; and notwithstanding our custom house officers,

[1] *British Commercial Organisation Explained*, 344.
[2] *Observations on the Commerce of the American States*, 248.

New England, New York, and Philadelphia carried on an almost open foreign trade with Holland, Hamburgh, France, etc., bringing home East India goods, sail cloth, Russia and German linens, wines, etc."

Weeden is also of the opinion that the Navigation Acts were largely evaded. In his *Economic and Social History of New England* he cites numerous instances to show the large extent of smuggling.

On the other hand, Professor W. J. Ashley[1] takes the position that, with the exception of the evasion of the Molasses Act of 1733, there was a comparatively small amount of smuggling done. Professor Ashley's reasoning is largely *a priori* and his argument is based upon the fact that, as most of the colonial trade must inevitably have been with the mother country, because that country was not only the best colonial market but also the market best able to supply the American settlements with the manufactures they required, there could not have been a very strong incentive for the colonists to engage in illegal trade. Mr. George L. Beer[2] also takes a conservative position:

"In the main the colonies consumed English and not French manufactures; few goods were imported directly from the European continent. . . . Likewise, in the main, the colonies sent the enumerated commodities to England. The truth of this is clearly apparent when we consider that by far the greater part of the rice and tobacco imported into England was reexported to other countries. While, on the other hand, the attempt to aid the English West Indies by the Molasses Act was a dismal failure, since it was contrary to all economic forces."

While it is undoubtedly true that the earlier writers overestimated the extent to which the American colonists engaged in illegal trading, there can be no doubt that the Acts of Trade, other than the Molasses Act, were more or less disregarded by many traders in the middle and New England colonies. There was some smuggling done in the southern colonies, but the inducement there was much less than in the North and the illegal trade must have been relatively unimportant.

In considering the question of smuggling or illegal trade, three facts should be borne in mind: First, that the colonists were Englishmen, who, from time immemorial, had been accustomed to smuggling as a regular practice. The illegal trade of the colonists probably only exceeded the illegal trade carried on off the coasts of Great Britain to the extent that it was possible to enforce the laws against smuggling somewhat more successfully in Great Britain than in America. Another fact to be remembered is that each of the colonies had laws for the regulation of colonial and foreign trade, and that much of the illegal trading was in violation of colonial laws as well as an evasion of the British Acts of Trade. Those who complained against illegal trade did not carefully discriminate between colonial and British legislation.

---

[1]*Surveys, Historic and Economic*, 336–360.
[2]*Commercial Policy of England towards the American Colonies*, 142.

Illegal trading was more extensively carried on at certain periods than at other times. During the war of the Spanish Succession, in the early years of the eighteenth century, and also during the French and Indian War, the violation of the Acts of Trade was notorious. The same was true of the twenty years when Walpole was the dominant factor in English politics, when he turned over the administration of colonial affairs to the Duke of Newcastle, who treated the colonists with "salutary neglect."

SUMMARY OF THE EFFECTS OF THE ACTS OF TRADE.

A survey of the general effects of the Acts of Trade shows that the following generalizations are warranted:

1. The acts required most of the export and import trade of the colonies with the continent of Europe to take the roundabout route via England. This was not especially burdensome, however, because England was practically on the route to the continent, and England was the natural emporium for most of the colonial-continental trade with the exception of rice. The southern colonies found the necessity of sending their goods to England somewhat of a hindrance. The continent provided the market for the larger share of the tobacco. It would undoubtedly have been more profitable for the Maryland and Virginia tobacco exporters and for the Carolina rice planters to have been able to ship such of their exports as they desired, directly to the Continent.

2. The customs duties paid to England in the case of goods destined for the Continent were a tax on trade in spite of the drawbacks granted by Great Britain. The laws that required the intercolonial trade to be carried on via England, or, in the case of that carried on directly from one colony to another, to pay an export duty equal to the British import duties, was burdensome to the extent that the laws were enforced. At times they were rather strictly enforced in the case of some colonies. Even when the laws were not enforced they were, without doubt, a deterrent to intercolonial trade.

3. The political effects of the Acts of Trade were quite as important as their economic results. Great Britain's commercial policy towards her colonies tended to emphasize any opposition of interest between the home country and the plantations, instead of developing a feeling that both the mother country and her dependencies had a common economic welfare. The trade policy of England gradually undermined the sentiment of loyalty on the part of the colonists. It was for this reason, in part, that it was difficult for Great Britain to enforce the Acts of Trade.

4. In endeavoring to enforce her commercial legislation in the colonies, it was early discovered that the laws could not be made effective in the chartered colonies. To strengthen her administrative

system, Great Britain took away the charters of the northern colonies and made them royal provinces. This proved to be a political misstep. In the long run, Great Britain was certain to fail in her attempt to govern her subjects in America by royal governors. The political revolution which was brought about in England in the nineteenth century was worked out in America in the eighteenth century. The efforts of Great Britain to strengthen her colonial administration by depriving the colonies of self-government failed partly, because the British officers in the colonies were under strong inducements, social and otherwise, to side with the colonies and to permit the British laws to be disregarded. Some royal governors and some customs-house officials were conscientious in their efforts to enforce the laws, but many of these sided with the colonists as the easier and more desirable course of action to follow. Indeed, many of the royal governors, after endeavoring to administer the laws, found that the obstacles to be overcome were insuperable, and that it would be impossible for them to carry out their instructions.

5. In general, Great Britain's attempt to live up to the mercantile system in her relations with her colonies was a failure both for political and economic reasons. The enforcement of the Acts of Trade could have been possible only with a much higher degree than had been obtained of political and social unity between the home country and the colonies. The wide separation of the colonies from the home country, not only in distance but in the time required for communication, prevented the establishment of an administrative system effective enough to give force to the mercantile policy. The colonies were so far removed from the home country that they tended to develop an autonomous economic life. The British Acts of Trade accentuated the tendency towards autonomy.

In endeavoring to apply the mercantile system of legislation to her commercial relations with her American colonies, Great Britain failed, because she sought to treat the colonies as outlying parts of her realm. As a matter of fact, the American settlements were not parts of the British realm; they were colonies, and as such they could not be successfully brought under mercantile legislation. The chief benefits to be derived from the American colonies were commercial; but Great Britain failed to realize that, in order to trade with her colonies largely and successfully, they must be permitted to develop their resources and industries in the fullest and freest manner. This is true of all colonies at all times. The principle, however, was not understood by Great Britain or any other country until some time after the beginning of the nineteenth century.

CHAPTER IV.

COMMERCIAL POLICY OF THE COLONIES.

Legislative power of colonies over commerce, 54. Authority exercised by Parliament, the Privy Council, and King, 55. Import duties of the colonies, 56. The four purposes of import duties, 57. Export duties, 59. Bounties, 60. Inspection laws, 62. Embargoes, 63. Tonnage duties, 63. Regulation and administration of ports, 64. Summary of commercial legislation in the colonies, 65.

The commercial legislation enacted by the several colonies needs to be considered in connection with the British Acts of Trade; both conditioned the development of American commerce, and affected, at least slightly, the progress of industry. Just as England in the seventeenth century, and Great Britain in the eighteenth, endeavored to regulate the trade of the colonies so as to increase the wealth and add to the power of the realm, so each American colony attempted to promote its own interests by elaborate laws. To some extent, the legislative enactments of the mother country and her American dependencies were complementary, not only because they applied to the same subjects, but also for the reason that they sometimes sought to accomplish the same results.

The trade acts of the colonies merit careful study. They reveal much regarding the nature and importance of the commerce of the several colonies; they throw light upon financial and industrial conditions; and they illustrate some of the causes of the clash of British and colonial interests. In legislating for the regulation and promotion of their domestic industry and external trade, the colonies developed the principle of self-government and achieved a far greater measure of political autonomy than had been intended by crown or Parliament. Neither the restored Stuarts nor the determined George III could substitute centralized British authority in place of the ever-developing colonial self-government. Indeed, it was in the efforts of the mother country to regulate and tax the external trade of the colonies that its administrative weaknesses were strikingly shown. The British laws that interfered with trade were largely evaded by the colonies; and when England attempted to enforce her statutes and administrative requirements, a spirit of independence and revolt spread throughout the colonies.

The legislative authority exercised by the colonies over commerce was but slightly limited by King or Parliament. Theoretically, the English colonists were settlers of regions belonging to the crown because discovered by explorers bearing royal charters. When the King made grants of American territory to corporations or proprietors he conferred upon them general governmental control over their plantations and settlements, subject to such regulative interference as the crown might

deem necessary. In both corporate and proprietary colonies the actual government soon came to be administered in large measure by the local legislatures. Theoretically all the laws passed by the colonial legislatures were subject to review by the Privy Council and to annulment by royal veto; but, with the exception of the influence over colonial legislation exercised by royal governors in those colonies where the governor was appointed by the King, there was comparatively little control over colonial legislation exercised by the King and Privy Council.

Parliament might have legislated to a large extent regarding colonial matters; but, as a matter of fact, the acts of Parliament were confined almost exclusively to the Acts of Trade regulating the commerce of Great Britain and the external trade of the colonies. In the long struggle to curb the power of the King but little effort was made by Parliament to supplant the royal authority over the colonies.

The powers which from the beginning of the establishment of the colonies were possessed by the Privy Council were three:[1] (1) It was the highest administrative board of the British Government concerned with colonial affairs; (2) it acted, or might act, as a high court of appeal for the determination of cases brought before it from the colonial courts; (3) it had power, at least after the establishment of the royal colonies, to grant or withhold its approval of the legislative acts of the colonies.

Prior to the restoration of the Stuarts the Privy Council limited its functions mainly to administrative acts. The decisions of the colonial courts were not reviewed, nor was it the practice to approve or veto legislative enactments. The corporate colonies, such as Massachusetts, had practically complete autonomy. The proprietary colonies did not have such full control over their local affairs, but in actual practice the differences were not very great. While it was theoretically possible for the King to control the proprietor and for the proprietors to regulate both the executive and legislative actions of their colonies, the actual interference of the King was but slight. As Osgood says:[2] "In their relations with the King the proprietary provinces were nearly as independent as were the corporate colonies."

When the Stuarts attempted to deprive the corporate colonies of their charters and to increase the royal control of colonial affairs for the purpose of developing a unified and systematic administration, their effort was made ineffective by the English revolution of 1689; and, although William and the Georges sought to make more effective the royal power of veto over colonial legislation, to control the acts of the colonies through the appointment of royal governors, and to limit the colonial courts by subjecting their decisions to review by the Privy Council, local government still made headway in the colonies. During much of the time for three-quarters of a century following the year 1689, Great Britain's attention was so taken up with the struggle

[1] Osgood, *American Colonies in the Seventeenth Century*, III, 16. [2] *Ibid.*, II, 440.

with France and with her continental wars that only intermittent efforts were made to extend and systematize her legislative authority over the colonies and her administrative control of their affairs. The consequence was that local self-government made such steady progress that the colonies, by 1760, had come to regard themselves mainly as self-governing bodies, related to Great Britain rather by ties of blood and economic interest than by political subordination.

The laws in regard to commerce enacted by the several colonies in the exercise of their practically unrestricted legislative power covered a large variety of subjects and were so unsystematic as to render classification and analysis especially difficult. This would naturally be true regarding the legislation of thirteen colonies acting not only independently, but, to some extent at least, with the intent of nullifying the acts of each other. Economic conditions in the several colonies differed largely and commercial legislation naturally reflected these variations. Moreover, the commercial legislation of most of the colonies was enacted to raise revenue; and as it was the practice to impose special taxes to meet particular and temporary needs, the laws were enacted without much reference to a well-defined policy. Again, there was the ever-present struggle between the colonial legislature and the royal governors, whose authority the colonists were always striving to restrict; and, as the most effective means of controlling the action of the governors was by laws regarding revenue, the commercial legislation was in some measure shaped by the changing phases of the controversies between the governors and the representatives of the people.

In discussing the commercial legislation of the colonies the laws may be treated under the following heads: Import duties, export duties, bounties, inspection laws, embargoes, tonnage duties, and port regulations. As each of the colonies passed many laws regarding all these topics, it will be necessary to avoid going into much detail.[1] The plan of discussion will be to state the extent to which the colonies, as a whole, legislated in regard to each of these topics, the purposes of the laws that were enacted, and the characteristic features of the legislation. Where definite results can be pointed out they will be stated.

IMPORT DUTIES.

Their revenue needs caused practically all the colonies, at one time or another, to impose duties on some of the commodities imported. This policy prevailed in spite of a general opposition to all laws restrict-

[1] The colonial legislation of the colonies is treated in detail in a book entitled *American Commercial Legislation Before 1789*, by Dr. Albert A. Giesecke. He began his study by making a tabular analysis of the provisions of the commercial legislation of each of the thirteen colonies in accordance with the classification above stated. From the tables thus made an analytical text was prepared discussing the more important details contained in the tabular analysis. The summary here given of the legislation is based on the work by Dr. Giesecke, who was one of the collaborators who assisted in the preparation of this history of American commerce.

ing trade. Every colony realized that its economic progress depended in a great measure upon the unrestricted growth of its maritime commerce. The view expressed in the minutes of the Pennsylvania Council in 1756 in regard to a proposed bill to levy certain imposts that "all were of the opinion that trade should be the last thing taxed; that exemption from duties and freedom of the port had more than anything else contributed to the increase of trade" probably voiced the sentiments of the majority of the colonists. The Pennsylvania bill of 1756 was opposed, because the legislators "were afraid this measure would divert" the trade from Pennsylvania to some other colony. There were only three colonies, Massachusetts, New York, and South Carolina, that adhered uninterruptedly to the plan of securing revenue by duties on imports; and in those colonies the duties were so imposed as to permit the largest possible development of the external trade.

The New England colonies, with the exception of Massachusetts, restricted imposts mainly to liquors and negroes. Connecticut and Rhode Island had no general tariff laws at any time, and the same is practically true of New Hampshire after 1722. Of the middle colonies, New York, whose policy was adopted about one hundred years prior to the Revolution, was the only colony that maintained an impost system. New Jersey and Delaware preferred to secure their necessary funds by other forms of taxation. It should be noted, however, that these two colonies had a rather small volume of maritime commerce. Pennsylvania imposed various duties on imports prior to 1723, after which for thirty-five years there was practically free trade. The expenditures for the French and Indian War necessitated a restoration of her duties. All the southern colonies levied imposts, the only exception being Virginia, which had free trade from 1644 to the close of the Commonwealth government in England.

The colonies had four purposes in levying imposts, different laws being intended to accomplish different ends:

1. The fiscal or revenue needs prompted most of the legislation. There is no evidence of an attempt to promote or to protect domestic industries by imposts. Bounties were granted and export duties were imposed to stimulate production; but the tariffs were non-protective, they were for revenue only.

2. The promotion of a direct trade with foreign regions of production was another aim of the impost duties. Several colonies granted lower duties or tariff exemptions in the case of commodities imported directly from the place of growth or production. Goods brought directly from England were also favored more than those from other countries.

3. The policy of aiding its own shipping was followed by each of five colonies, the lower duties granted to domestic ships being usually on cargoes brought directly from the place of production. Connecticut

and Virginia made the duties on wines and liquors lower; Maryland charged no duties on them when imported in domestic ships, and Pennsylvania allowed molasses to come in free, and Madeira wines at a reduced rate, if brought in Pennsylvania vessels. South Carolina's legislation was more elaborate. It provided that goods could be imported duty free in vessels built and owned by the inhabitants of South Carolina; for one-half of the regular duties in ships built in South Carolina and owned outside of the colony; and for three-fourths of the regular rates in vessels built outside of the colony but owned by its own inhabitants. This law, enacted in 1716, was repealed by the proprietors of the colony in 1719. Two years later, however, the colony reenacted the law and provided that a long list of dutiable goods might be imported at one-half duty rates in vessels built and owned in South Carolina, and at three-fourths the regular duty when brought in vessels built in South Carolina and owned by non-residents.

These laws favoring the direct trade and domestic shipping applied only to wines and liquors in the case of three colonies, and only to those articles and molasses in Pennsylvania. South Carolina alone applied the principle generally to import duties. These laws, however, were enacted during the latter part of the seventeenth and early part of the eighteenth century and had expired by limitation or repeal some time before the Revolution, doubtless because they discriminated against British shipping and thus met with the opposition of the home government. In the majority of the colonies the laws imposing import duties had, from the beginning, made exemptions in favor of goods coming from England. At the time of the outbreak of the Revolution the colonial laws not only favored English goods, but also avoided discrimination against British as compared with colonial ships.

4. In a few instances the colonies levied import duties to retaliate against their neighboring colonies. Maryland, as one of the results of the dispute over her northern boundary, sought to punish Pennsylvania by charging much higher duties on imports from that colony than from other sections. Pennsylvania, while generally inclined towards low duties, imposed a 10 per cent rate on goods from Maryland, New York, New Jersey, Delaware, and Virginia, because those colonies had imposed duties on her exports; although, with the exception of Maryland, they placed the same rate on goods from Pennsylvania that they did on articles from other colonies. Pennsylvania's action was taken because she felt that other colonies should treat her as well as she treated them. On two occasions Massachusetts retaliated against her neighbors by imposing discriminating duties to punish them for actions which were deemed to be unjust, but this legislation was only temporary; indeed, the retaliatory legislation of the colonies was neither general nor of great importance in their commercial history.

The import duties imposed by the colonies were both ad valorem and specific. The earlier laws provided usually for ad valorem rates, while

those enacted at a later date generally levied specific duties, the plan most favored during the later years of the colonial era being to enumerate certain articles which were made subject to specific duties, and to place general ad valorem duties upon all non-enumerated commodities, excepting those definitely exempted from imposts.

The articles which paid most of the import duties were wines, liquors, tobacco, sugar, molasses, cocoa, and dye woods, and, during the later years, tea. Wines and liquors, because they were luxuries, were charged a far higher rate than were other commodities, and were taxed by all the colonies, the purpose of the duties, however, being fiscal rather than ethical.

It was customary to grant a drawback of the duties in the case of reexported commodities; but this policy was more prevalent in the later than in the earlier years of the colonial period. It was not usual, except in Connecticut and Rhode Island, to refund the entire amount of the duty. The policy of giving drawbacks was applied chiefly to the duties on liquors and negroes, the purpose being not only to stimulate trade in those articles, but also to aid the manufacture of liquors. Possibly the exportation of liquors was favored because it was employed in the profitable though nefarious slave trade.

EXPORT DUTIES.

Duties were levied on export commodities by all of the colonies except Delaware and Rhode Island, but much less dependence was put upon this source of revenue than upon taxes on imports. New York, Maryland, South Carolina, and Virginia had more comprehensive levies upon exports than did the other colonies, which before the year 1750 had all repealed their export duties.

Taxes upon exports were laid mainly for three reasons: to secure revenue, to stimulate domestic production, and to encourage direct trade, the revenue purpose being the most important. Efforts to increase the direct trade by means of these duties were made by only two colonies, and they did not continue the policy after the beginning of the eighteenth century.

Tobacco, skins, furs, and lumber were the commodities upon which the heavier export taxes were placed, but the list of other articles whose export was made subject to payment of light duties was comparatively long. Among the miscellaneous articles which, at some time, were subjected to export duties by one or more colonies, were fish, meat, wheat, pitch, tar, iron, and wool. For a while Maryland placed a 10 per cent ad valorem duty on all European goods reexported from the colony. New York imposed a duty on goods sent up the Hudson River to the Indians—a unique law that was enforced until the outbreak of the French and Indian War.

The nature and purposes of the export duties may be indicated by referring to those placed upon tobacco, lumber, and skins. Maryland

and Virginia naturally were the colonies which levied the duties on tobacco, and, as this was their chief staple product and was practically all exported, these duties provided a reliable source of revenue. The Maryland laws date from 1641; those of Virginia from 1657. The taxes levied by Maryland on exported tobacco were intended entirely to secure revenue for various purposes. Virginia, on the other hand, framed her laws with a view to encouraging trade and effecting its distribution. The tobacco shipped in vessels owned by Virginians was usually exempted from duties, and it was customary to remit the duties or impose lower taxes on tobacco sent direct to England. For a time before 1660 the Dutch and all foreigners were required to pay especially heavy duties, but by the British Acts of Trade of 1660 the colonial trade was restricted to British and colonial ships.

Export duties on lumber were levied by five colonies, and, with the exception of South Carolina, the duties were imposed where ship-building and coopering were important industries, one evident purpose of the laws being to protect the domestic manufactures against an exhaustion of desirable lumber. Connecticut and New Jersey imposed heavier duties upon timber and for a longer time than did the other colonies. The duties were placed upon shipments to other colonies rather than upon those to Great Britain, and laws were enacted to preserve the timber supply. The three other colonies that had export duties on lumber (New Hampshire, Massachusetts, and South Carolina) repealed the laws early in the eighteenth century and their legislation upon this subject lasted for only a few decades.

Furs, skins, and hides were subjected to export duties by all the southern colonies and by some of those in the North, eight in all. South Carolina and Virginia levied these duties practically throughout the colonial period, while most of the other colonies repealed these charges before the middle of the eighteenth century. The reasons for this are manifest. During the early decades, while an abundant supply of furs could be obtained and exported and while the colonies had few taxable industries, it was natural that these export duties should have been levied. With the decline in the supply of furs and the consequent decrease in their export and with the development of industries and trade, the export duties on skins and furs were mostly all repealed. The export charges had the effect of increasing the supply available for domestic users of furs and skins, and it is probable that they were imposed partly to protect the home industries.

BOUNTIES.

The granting of bounties to induce the colonies to produce and to export certain articles desired by Great Britain, as was previously explained, was a definite part of the British commercial policy. At various times Great Britain gave bounties to the colonies to increase their exports to England of flax, hemp, silk, fish, pitch, tar, potash,

timber, yards, masts, wine, rice, and tobacco. This policy of the mother country was supplemented by bounties granted by all the colonies except Delaware. The southern colonies had the most comprehensive and liberal laws, while New England gave more emphasis to the policy than did the middle colonies.

The colonial bounties were of two distinct kinds: those to aid production and those to increase exports. Bounties to increase the growing of hemp and the making of flax were granted by most of the colonies, they as well as the mother country being especially desirous of securing a greater supply of materials for the manufacture of cloth, canvas, and other linen stuffs. With the exception of Massachusetts—and in her case the exception was but for a short time—the bounties were granted only for hemp and flax and not for the manufactured article. This is easily accounted for by the fact that the British need was for the raw materials rather than for the manufactures, and also by the fact that the colonists were not prepared to engage to any considerable extent in anything but strictly domestic manufactures.

The growth of silk was aided from time to time by Connecticut, New Jersey, South Carolina, and Virginia. The growth of wheat was encouraged by bounties in South Carolina, Georgia, Virginia, and Massachusetts, and in the case of South Carolina and Massachusetts an additional bounty was granted for the manufacture of flour from home-grown wheat. During the Revolution the scarcity of salt induced the colonies generally to grant special bounties on that article. During the colonial period, however, only Virginia and South Carolina had thought it necessary to grant salt bounties. Among the other articles that received bounties were wine, olive oil, and indigo, which were raised by South Carolina; whale bone, whale oil, and codfish by Rhode Island, and ship-building, which was encouraged by bounties given by Virginia and South Carolina.

With the exception of hemp and flax, it is probable that these bounties on production had but comparatively slight effect.

The exportation of commodities received less aid from bounties than production did, most of the bounties to aid exports being granted by Virginia, North Carolina, and South Carolina. The list of articles aided included tar, hemp, flax, pot and pearl ashes, saltpeter, indigo, cotton, and ginger. In order to secure an export bounty the shipper was required to produce a certificate from the county justice stating that the articles had been actually produced within the colony by the person claiming the bounty. Before the bounty was paid it was also necessary to show a certificate executed by the proper official at the port to which the commodities had been shipped.

What the effects of the bounties on exports were would be difficult to measure. Some of the articles aided, for instance, pot ashes and indigo, came to be exported in large quantities during the eighteenth century, and it is probably safe to assume that the trade in these

articles developed earlier and reached a larger proportion than would have been the case had they received no aid from bounties.

It should be noted that production and trade were aided in numerous ways by the colonies. Bounties constituted only one, though the most important, method of giving assistance. As Mr. Fisher says:[1]

"Aside from the usual method of granting pecuniary bounties proportional to the amount of the product, prizes were offered for the first or the best produced; taxes were remitted to manufacturers; monopolies of the market were given for limited times; lands were granted; bills of credit and loans were issued to the projectors of mills; producers were exempted from military duty; certain articles were either made receivable for taxes or were constituted general legal tender; and in many cases the declared purpose was to promote domestic production. The branches of industry thus helped by the colonial governments were not only those engaged in the production of raw materials and naval supplies, but also manufactures, as of salt, powder, firearms, iron, linens, cottons and woolens."

INSPECTION LAWS, EMBARGOES, AND TONNAGE DUTIES.

The export trade of the colonies was most carefully regulated by inspection laws enacted primarily for the purpose of preserving the reputation in the foreign market of the articles shipped abroad. As the commerce of the colonies increased in quantity and variety the inspection regulations became more detailed. In a few instances imports were subject to inspection, but the legislation regarding imports was comparatively unimportant.

Different colonies provided for the inspection of various articles, but the inspection of beef and pork was insisted upon everywhere. In New England and New York exported fish was carefully inspected, and in every colony, except Delaware, the laws provided for official measurement and inspection of exported timber and lumber. Among the other articles worthy of special mention because of the rigid inspection of exports are tobacco, flour, bread, and naval stores. Special care was taken to prevent the exportation of tobacco of poor quality. The colonies from which liquors were shipped abroad provided for the official gaging of casks, and in the case of nearly all the commodities exported the government passed such laws as were deemed necessary to prevent the shipper from deceiving the foreign buyer.

The temporary prohibition of all trade in certain commodities was frequently deemed necessary. Whenever any colony was threatened with a scarcity of the domestic supply (as of food), all exports were prohibited. During the war periods, as from 1756 to 1763, embargoes were usual; and in a few instances trade was prohibited for the purpose of protecting home industries. The earlier embargoes were laid to prevent the scarcity of provisions, whereas during the later colonial period (for instance, during the French and Indian War) the exporta-

[1]Fisher, *American Trade Regulations Before 1789* (Papers of the Amer. Hist. Assn., III, No. 2, 1889), p. 470.

tion of commodities was prohibited in order to prevent their reaching the enemies of the colonies and of Great Britain. Embargoes due to war covered not only food supplies but munitions of war and naval stores. During the French and Indian War Georgia and Virginia alone failed to place an embargo upon the export of these articles, but it is well known that these embargoes did not deter the colonists from selling large quantities of supplies to the French. This constituted a serious grievance of Great Britain against her colonies, whom she regarded as being thereby disloyal to the interests of the mother country.

There are but few instances of the use of embargoes to aid or to protect home industries. New Hampshire for a while prohibited the exportation of iron ore; Virginia, upon two occasions, and Maryland in one instance, stopped the exportation of wool and scrap iron. Several colonies, for purposes of protection, placed temporary prohibitions upon the exportation of skins and hides, and some of these embargoes prevented the shipment of these articles to certain countries, while allowing them to be sent to others.

There were two methods of imposing embargoes upon trade. The more usual method was by special legislative enactment, but in the case of five colonies the governor was authorized to declare embargoes under certain legally prescribed conditions. In a few cases, the embargoes became automatically effective when prices exceeded a specified limit fixed by law. Instances of this are to be found in the legislation of Virginia and Pennsylvania.

With the exception of Delaware and New Jersey all the colonies imposed tonnage duties practically throughout the colonial period, these being among the earliest methods of taxation. At the beginning the tonnage charges were levied mainly to raise money for the defense of the colonies and particularly for the construction and maintenance of forts at the entrance to the harbors; and it was customary to permit the master of the vessel to pay his duties either in cash or in powder. For this reason the early duties were often designated as "castle" duties or "powder" money. During the eighteenth century the revenues from tonnage duties were devoted to the maintenance of lighthouses, and, in a few instances, for beacons, buoys, and seamen's hospitals.

In levying the tonnage duties it was the usual, but not the invariable, practice of each colony to favor the shipping owned by its own inhabitants. Similarly, the vessels engaged in the coasting trade were generally treated more liberally in the tonnage tax laws than were vessels engaged in the over-sea trade; and it was customary (particularly in New York, Pennsylvania, and New England) to favor the shipping owned by the inhabitants of neighboring colonies. This policy, however, did not prevail in the South, although there are one or two

instances of lower tonnage duties being granted to vessels owned by the people of nearby colonies. Occasionally British ships were exempted from colonial tonnage taxes, but this was not the common practice.

In general, it may be said that the tonnage-tax laws of the colonies were similar to those imposed by Great Britain, and that there was a greater uniformity among the several colonies as regards these laws than was true of other branches of colonial legislation.

REGULATION AND ADMINISTRATION OF PORTS.

Every country finds it necessary to provide for the careful regulation of commerce at its ports and to care for the improvement and administration of its harbors. The ports at which commerce may be carried on must be designated, measures must be taken to prevent smuggling, the registration of vessels of domestic ownership must be required, wharfage duties and port fees assessed and collected, pilotage provided for, quarantine rules carried into effect, and the laws for the protection of seamen enforced. These and other details of port administration comprise an important phase of commercial regulation.

The difficulties connected with the enforcement of its port regulations and the expenses of maintaining customs and other officials made it necessary for each colony to restrict its maritime commerce to a limited number of ports. The southern colonies, however, whose seaboard was especially long, were obliged to have a relatively large number of ports at which trade might be carried on.

Most colonies did little to improve their harbors. The small ocean craft used in the seventeenth and eighteenth centuries were able to enter the natural and unimproved harbors, but the safety and convenience of shipping often required the placing of beacons and buoys. With the exception of three colonies, port improvements were made from time to time under the auspices of the executive branch of the government, or by temporary commissions; but in North Carolina, South Carolina, and Pennsylvania the improvements were placed in charge of permanent harbor commissions, the Pennsylvania authority being called the Board of Port Wardens for the Port of Philadelphia.

Each colony had the requisite port officials for the execution of its laws, the collector of the customs, the naval officer, and at some of the ports a powder receiver and a comptroller. The collector of the customs and the naval officer were intrusted not only with the administration of the colonial laws but also with the enforcement of the British Navigation and Trade Acts. The difficulties encountered by these officials in the execution of their duties and the extent to which smuggling prevailed are considered elsewhere.

Some of the more important phases of the policy of the colonies in the administration of their ports and the regulation of trade are illustrated by the laws passed by nearly all governments regulating

rates which the owners of wharves, docks, and storage facilities might charge the public for their use; by the legislation concerning pilotage enacted by all the colonies except New Hampshire, Rhode Island, New Jersey, and Maryland; and by the legal safeguards thrown about seamen to protect them from unjust treatment by their masters or by others. As was customary, not only in America, but in all the ports of the world, numerous petty fees were charged by the officials in charge of the ports for the performance of their duties. The coasting trade was frequently favored by imposing lower port fees upon vessels engaged in that traffic.

The commercial legislation of the colonies, like that of England, was based upon the mercantile theory of strict regulation. In applying this theory to the economic and political conditions of the New World, the colonial laws differed widely in detail from those of the mother country, but they were based upon the same concept of the government's duty as the controller of all economic affairs. The colonists sought to promote their industry and trade by governmental measures similar in provisions and in minuteness of detail to those by which England was aiding her producers and merchants.

Except in so far as it was for fiscal purposes, the commercial legislation of the colonies was to aid shipping and to regulate and promote trade; and was not in many instances enacted to further the interests of production. The legislation, speaking generally, was commercial rather than industrial or protective, although the bounties were intended to aid both trade and industry. The export duties, likewise, were not alone for revenue. They sometimes were levied to protect the domestic manufacturer and consumer from a depletion of his supplies; and were occasionally so framed as to discriminate in favor of domestic shipping and direct trading.

CHAPTER V.

THE EARLY DEVELOPMENT OF AMERICAN COMMERCE FROM 1660 TO 1700.

Significance of the period, 66. Economic and political status of the colonies from 1660 to 1700, 67. Leading industries: agriculture, 70, fur trade, 71, appropriation of forest resources, 71, the fisheries, 72, manufactures, 72, ship-building, 72. The maritime trade of the colonies as a whole, 73. New England's commerce, 75. The trade of New York and East Jersey, 77. The trade of Pennsylvania, West Jersey, and Delaware, 78. The commerce of Maryland and Virginia and the Carolinas, 79. General survey of commercial conditions, 81.

The history of the external trade of the colonies from 1660 to the War of Independence can be presented to advantage by considering it from three points of view: The commerce of the colonies considered as a whole; the industries and trade of the natural territorial subdivisions, New England, the middle and the southern colonies; and the trade of the colonies with the different sections of the world with which commerce was carried on, Great Britain, the continent of Europe, the West Indies, and Africa. The exchanges of the colonies with each other, which were of less volume and value than was their over-sea trade, will receive separate treatment in another chapter.

It will be convenient and add to clearness to subdivide into two parts the period of one hundred and fifteen years of the development of the commerce of the American colonies under the British Acts of Trade as enacted in 1660, and to discuss in turn the last four decades of the seventeenth century, and the seventy-five years of the eighteenth century that preceded the Declaration of Independence.

The close of the seventeenth and the beginning of the eighteenth century marks a good point of time at which to take a survey of colonial commerce, to note what progress has been made, and to take account of the political and economic conditions to which trade development was subject. All of the colonies, except Georgia, had been settled by 1700; their political institutions had been given permanent form by the reorganization of their governments following close upon the overthrow of the Stuarts and the accession of William III; in each colony the settlers had ascertained what industries were profitable; and the lines of external trade had been marked out.

The policy of trade regulation adopted by England upon the restoration of the Stuarts had been continued and strengthened by Parliament after William came to the throne; and, with the exception of the unenforced Molasses Act of 1733, there were no trade laws passed by Parliament from the beginning of the seventeenth century until 1764—not even the acts limiting certain colonial manufactures—that may rightly

be considered to have effected or to have been capable of effecting any important change in the principles underlying British regulation of American trade. Accordingly one may generalize, with fair accuracy, that the early development of American commerce under the British Acts of Trade occurred during the later decades of the seventeenth century, and that the larger growth of that commerce took place between the early years of the eighteenth century and the beginning of the struggle of the colonies for economic and political independence. This chapter is concerned with the period from 1660 to 1700.

ECONOMIC AND POLITICAL STATUS OF THE COLONIES FROM 1660 TO 1700.

Before entering upon an account of the trade of the colonies during the last forty years of the seventeenth century, a brief survey of the status of the several colonies at that time may well be taken in order to secure the necessary background to the presentation of the commerical events.

Until near the close of the seventeenth century, the limited resources and sparse population of the colonies and the vigorous opposition of the Indians kept settlement within a narrow strip along the ocean from the Kennebec River, Maine, to, or slightly beyond, the Ashley River in South Carolina. The English and French were contending for the region east of the Kennebec, while the claims of the Spaniards extended as far north as the Savannah River. In the Connecticut and Mohawk valleys two frontier sections had been occupied; but the Great or Appalachian Valley of Pennsylvania, Maryland, and Virginia had not yet been invaded by white men. It was not until the last decade of the century that even the towns near the seacoast were safe against Indian forays.

The number of people in the colonies from 1660 to 1700 is not known. Estimates make the population of New England about 90,000 at the end of the century; in the middle colonies there were probably 75,000 persons; in Maryland and Virginia between 90,000 and 100,000; and in the Carolinas possibly 20,000 or 25,000. Apparently the total population, white and black, in 1700 was between 250,000 and 300,000.

The settlers of New England and of all the southern colonies were mainly English, a small French Huguenot settlement in South Carolina forming a minor exception. There were some negroes in all sections, but the number of blacks increased from the North towards the South, the negroes outnumbering the whites in South Carolina at the end of the century. In New York, the Dutch probably were in the majority; and Pennsylvania contained Swedes, Dutch, and some Germans, as well as the English Quakers who constituted the main body of the inhabitants.

New England led in general economic development; Virginia and Maryland in the value of agricultural productions. The most serious

check to New England's progress during the forty years following 1660 was given in 1675–76 by King Philip's war, which practically destroyed the beaver trade, seriously retarded the fisheries, and burdened agriculture with heavy losses. In general the twenty-nine years of the rule of the restored Stuarts were unfavorable to the development of New England and the other colonies, but the main consequences of the misgovernment of the Stuarts and of the régime of Andros were political rather than economic.

New York advanced slowly during the seventeenth century. The English conquerors had perpetuated the patroonship system of land tenure, and had continued the burdensome taxes on trade. It was not until the eighteenth century that the agricultural resources of New York and her natural advantages for trade began to exert their due influence; indeed, it was after the opening of the nineteenth century that the third barrier to the settlement and the economic progress of New York, the occupation of the larger part of her territory by the firmly seated Six Nations, was finally overcome. Although New York has long been the Empire State, it was not the empire colony.

The Jerseys, likewise, under Carteret and Berkeley, the proprietaries to whom the territory was granted in 1664, made relatively slow headway until after the Jerseys became a crown colony in 1702. The proprietors were chiefly concerned with deriving a revenue from their possession, their rights were frequently bought and sold, and the colonies were not well governed. "Controversies among the proprietaries themselves, between the proprietaries and the inhabitants, and between the colonies and their neighbors rendered a rapid and prosperous growth practically impossible."[1] In the seventeenth century, and for a longer period, East Jersey was, economically considered, a dependency of New York, and before the close of the century Philadelphia had become the principal entrepot for West Jersey.

Pennsylvania and Philadelphia developed rapidly from the start; not only because of the zeal and success of the Quakers and others whom Penn sent out and brought over in the early eighties to settle at and near Philadelphia, but also because the Swedes and Finns who settled along the lower Delaware as early as 1638, and the Dutch who arrived in the region in 1631 and again in 1638, had started the economic development of the basin of the tidal Delaware long before Philadelphia was founded. Penn's colony was not obliged to pass through the doubtful years of uncertain struggle that nearly wrecked the Jamestown and Plymouth plantations. Penn's conciliatory policy towards the Indians made them his trade allies rather than his armed foes, while the prosperous farms along Delaware Bay furnished the Pennsylvania settlements with needed supplies, and early made Philadelphia an important center of both domestic and over-sea trade. Thus it was that by the end of the seventeenth century, before Phila-

[1]Andrews, *Colonial Self-Government*, 128.

delphia was twenty years old, Pennsylvania had a well-established trade with Europe and the West Indies, as well as with the other colonies; indeed, Penn stated, as early as 1683, that the colony had a surplus for export.

The development of Maryland and Virginia was relatively slow during the later decades of the seventeenth century. In each colony the culture of tobacco by plantation methods had become the chief activity of the people, and while each colony made headway, Virginia holding first place among all the colonies, both suffered from internal dissensions, and Virginia was afflicted with a costly Indian war. In Maryland the internal troubles were due to the strife of Protestants and Catholics and to the opposition of the people to the selfish and inefficient rule of the proprietaries. In Virginia, Governor Berkeley's long régime of inefficiency was made doubly detrimental by the Indian war of 1675–76, and the contemporaneous unsuccessful rebellion led by the incompetent Bacon. Berkeley ceased to trouble Virginia in 1677, but the other governors sent out by the Stuarts were little if any better, and it was not until the last decade of the century, when the English revolution had brought about a reorganization of the colonial governments, that Virginia was permitted to enter upon a period of prosperous growth.

With the exception of the small settlement made at Albemarle from Virginia, about 1660, the Carolinas remained without successful colonization until 1670, when Ashley founded Charles Town. The favorable location of Charles Town soon made it an important center, but the growth of South Carolina was not rapid. The progress of Albemarle and North Carolina was much slower. Both suffered from bad government, due mainly to the conflicting interests of the proprietors and the colonists. The persistent but unsuccessful attempt of the proprietors to force Locke's "Grand Model" government upon the struggling settlements in the American wilderness is well known. The only consequence of the attempt was to arouse the opposition of the colonists and to retard the development of the colony. A change for the better in political conditions came after 1690 in the Carolinas, as it did in most of the other colonies.

Georgia was founded by Oglethorpe in 1732. There were some temporary settlements south of the Savannah before the year 1700; but Georgia was merely a source of furs until it began its existence as the "buffer" colony organized by the English for the purpose, among others, of holding the Spanish and French in check.

LEADING INDUSTRIES OF THE COLONIES FROM 1660 TO 1700.

While the trade of the colonies was affected by the political conditions to which reference has been made, it was dependent upon and associated with industrial activities. The leading industries of the different sections were widely variant, but were few in number and may be readily reviewed.

In general, it may be said that practically all of the industries characteristic of the economic life of America during the colonial period had been inaugurated before the end of the seventeenth century. Certain manufactures, notably those of iron, had by that time made only slight beginnings; but as most kinds of manufacturing were confined mainly to those carried on in the homes or in the towns to meet strictly local needs, as the work of millers, smiths, wheelwrights, etc., the changes that took place during the eighteenth century were chiefly those that came from growth rather than from any revolution in industrial methods or activities.

In discussing the beginnings of American commerce during the period from 1600 to 1660 (Chap. II), brief references were made to the natural resources of the New World and to the industries by means of which the colonists first secured a living and obtained the products that were exchanged in their domestic and external trade. Supplementary to what was said there it is desirable, in this connection, to make a summary statement of the economic interests and occupations of the colonies as a whole, and of the northern, middle, and southern sections severally during the later decades, and at the close of the seventeenth century.

Agriculture was the chief occupation of the great majority of the people in all the colonies, even in New England, which had the most diversified economic life. There were, however, wide differences among the colonies in the crops grown, the methods of culture, and the manner of living. The farm in New England was small and was cultivated mainly by the owner and his family. The farmers sometimes lived upon their own land, and often in small villages from which they worked their outlying farms, as had been customary with them and their ancestors in England. The soil was relatively unproductive, cereals and corn were raised with difficulty, and pulse and potatoes were important articles of food. In New York the patroonships persisted; but the farm of medium size owned in fee simple was becoming more and more characteristic. Cereals were the main crops. The Pennsylvania farm was larger than the average holding in New England, the soil was more fertile, cereals and corn were more extensively planted, and larger use was made of hired labor.

Plantation farming prevailed generally in Maryland, Virginia, and the Carolinas. The holdings were especially large in South Carolina and Virginia, although the size of Virginia plantations was kept in check somewhat until 1699. In that year Virginia repealed a law that had limited any planter's holdings to 50 acres per servant or person whom the planter had brought into the colony. The vast plantations of Virginia were mostly acquired during the eighteenth century. The large plantation was organized with a view to producing one staple crop, as tobacco or rice, for sale, and such cereals and other foods as

the plantation required. The economic ideal was single-crop farming, the sale of the farm products, and the purchase of all manufactures and supplies other than such tools and homespun clothing as the plantation hands could make. Virginia and South Carolina depended almost entirely upon slave labor; Maryland less exclusively so. Tobacco was almost the sole export crop of Virginia and Maryland during the period under consideration. In the Carolinas there was more diversification in production, but before the year 1700 rice had become the chief export staple.

The trade in furs carried on in all the colonies with the Indians had from the earliest days of settlement contributed an important item to the sum total of their external trade. This trade continued through the seventeenth and eighteenth centuries, growing less in volume with the steady advance of settlement and shifting in location as time went on. While the colonial fur trade was largest in New York, it was actively prosecuted in New England, the middle colonies other than New York, and the southern colonies. The Indian wars between 1670 and 1680, King Philip's War in New England, and the war in Virginia in 1675–76, seriously checked, although they did not end, the fur trade, even in New England and Virginia.

The continued growth of the British colonies in America could mean only the decline of the trade with the Indians. The Briton displaced the Indians; he did not assimilate with them, as the French and Spaniards were wont to do. The French were most successful fur traders, and the Canadian wilds, instead of the forests back of the British colonies in America, had by the close of the seventeenth century come to control an increasing share of the fur-export trade. From the industrial and commercial point of view this was no misfortune for the British colonies, because their capital and labor were more profitably devoted to other pursuits than trading with the Indians.

Throughout the colonies, the valuable natural resources of the forests were appropriated and made to contribute to commerce and wealth. Clapboards and other lumber were among the earliest exports from America, and throughout the colonial period the exports of timber and lumber, masts, naval stores, and ships were a prominent feature of the external trade. Housebuilding materials went to the West Indies and Europe, ships and ship-timbers were sold mainly in Great Britain, whose laws favored the exportation of these articles from the colonies. New England led in the construction of ships and in the exportation of masts, but New York and Pennsylvania each made its contribution. The southern forests supplied the pitch, tar, and rosin and the durable yellow pine for the construction and equipment of vessels.

It is a satisfaction to know that the colonists were able to derive as much wealth as they did from the vast forest resources. Unfortunately, the settlement of the country and the development of agriculture

necessitated the destruction of the forests. The land had to be cleared; the tree was the foe of the farmer. Thus it was that for two and a half centuries in America the larger part of the forests had to be destroyed at great expense instead of being profitably utilized. The situation has now changed and the American people are spending large sums to maintain and enlarge the remnants of their once seemingly limitless forests.

Next to agriculture, the sea fisheries yielded the most wealth of the several colonial industries, and they also held a prominent place in the external trade. The Grand Banks fisheries, which had been prosecuted since the early part of the sixteenth century by men from England, France, and Portugal, were followed by an increasing number of the people of New England during the colonial and early national periods. The catching of cod on the various banks off the New England shore naturally developed as settlement progressed, and from 1668 on, deep-sea whaling became a business of expanding importance. Sea-food was a valued asset in all the colonies, but the towns from which the commercial fisheries were carried on were mainly in New England, although there was some trade in fish by the colonies on the New York, Delaware, and Chesapeake bays.

Most of the manufacturing done in the colonies was to supply domestic and plantation needs; but, from the earliest days, forest products were prepared for export, lumber of different kinds, masts, and, somewhat later, naval stores. Provisions and flour and rum were early added to the over-sea shipments, particularly to the West Indies. The colonists also found a limited market in supplying the ships with their needed stores, and until some time after the close of the seventeenth century the traders, especially those in southern ports, were not particular about inquiring whether the shipmasters were engaged in mercantile or piratical pursuits.

The manufactures which early gained and long held special prominence were New England rum and ships. The rum industry created a demand for West Indian molasses, thereby made a larger market for New England's exported fish, lumber, provisions, and live animals, and supplied the slave-traders of Newport and other towns with the commodity with which African negroes could be purchased. The sale of negroes in the southern colonies and the direct shipment of rum to the middle and southern sections promoted intercolonial trade, whatever the moral effects of slavery and rum-drinking may have been.

From the launching of Governor Winthrop's little 30-ton sloop, the *Blessing of the Bay*, in 1631, the coast towns of Massachusetts Bay Colony actively engaged in ship-building. The industry was carried on to some extent in Rhode Island, but not in Plymouth, and but little in Connecticut. As early as 1638, a vessel constructed in New England sailed up the Thames. In 1665, the Court of Massa-

chusetts estimated that the people of the colony then owned 192 vessels, large and small.[1] According to the report made in 1676 by Edward Randolph, who was subsequently for a long time the British collector of customs for New England, there had, up to that time, been 730 vessels built in Massachusetts.[2] While New England led in the building of ships, the industry was carried on in New York and Pennsylvania, and to a slight extent farther south.

The great majority of the early colonial-built vessels were as small as 50 tons burden or less, constructed for the fisheries and the West Indian and intercolonial trade; but a part of them were of 100 or more tons burden and thus belonged to the class of larger ocean ships of that time. This fact is illustrated in a report made by Governor Dudley shortly after 1700, who stated that the trade of Massachusetts then required 200 vessels, of which 20 were of more than 100 tons burden each, and 60 exceeded 50 tons capacity.

The sale of the ship as well as its cargo in the foreign port early became a frequent occurrence, because the Americans had an abundance of excellent ship lumber and masts and were skillful shipwrights. The British market for American ships continued throughout the colonial period; and at the outbreak of the Revolution 30 per cent of all the ships (2,342 out of 7,694) engaged in the commerce of Great Britain were built in American yards. The British writer Champion stated that "America was able to supply us with ships 30 per cent cheaper than they could be built in Great Britain."[3] Fully three-fourths of the commerce of the colonies during the later colonial period was carried in ships of their own construction.

MARITIME TRADE OF THE COLONIES AS A WHOLE.

The other notable business activity of the colonists was the maritime trade, European, intercolonial, West Indian, and, to some extent, African, to which their productive industries and need of imports gave rise.[4] The value of the trade of the colonies with the mother country

---

[1] Doyle, *English Colonies in America*, III, 28. [2] Andrews, *Colonial Self-Government*, 332.

[3] Champion, *Considerations on the Present Situation of Great Britain*, etc., 1784.

[4] Statistical information is very meager as to the commerce of the colonies during the seventeenth century; indeed, the systematic compilation of the trade of Great Britain with the colonies began after the appointment of the Board of Trade and Plantations by William III in 1696. There is no continuous record of the trade of the colonies as a whole or severally even during the eighteenth century, with countries other than Great Britain, with the West Indies, and with each other. The British Act of Trade of 1663 had provided for the appointment of naval officers at the colonial ports, among whose duties was that of recording imports and exports, but they were not appointed until a decade or more had elapsed, and then probably only for a part of the ports. (Andrews, *Colonial Self-Government*, 33.) The British act of 1672 created the office of collector of the port to collect the duties imposed by the law, and during the next few years (*Ibid.*) such officers were appointed for New York (1674), Virginia (1674), Maryland (1676), Albemarle (1677), New England (1677), Carolina and Roanoke (1685), South Carolina (1685), and Pennsylvania (1688). The records of the customs officers in England probably would not furnish the material for a statistical account of colonial commerce during the later decades of the seventeenth century, were the records in existence. Whatever they contained was lost a century ago in a fire that destroyed the original customs records. The reports of the naval officers were more regularly and systematically made, and they have been preserved.

in 1697, near the close of the period under special consideration in this chapter, is stated by the official statistics kept by the customs officers at the ports of Great Britain to have been £140,132 7s. 6d. for exports to the continental colonies in America, and £279,854 11s. 9d. for the imports thence into Great Britain, the total of exports and imports being £419,986 19s. 3d. The year 1697 was the first one after the establishment of the Board of Trade. The value of the trade for the year 1700 was: British imports from the colonies, £395,023 18s. 10d.; British exports, £344,343 18s. 4d.; total £739,367 17s. 2d.

The distribution of this trade among the different colonies in 1700 was as follows:

TABLE 1.—*Trade of Great Britain with Colonies in 1700.*

	British imports.	British exports.	Total.
	£ s. d.	£ s. d.	£ s. d.
New England	41,486 11 9	91,918 14 6	133,405 6 3
New York	17,567 10 0	49,410 15 0	66,978 5 0
Pennsylvania	4,608 9 8	18,529 6 2	23,137 15 10
Virginia and Maryland	317,302 12 11	173,481 10 4	490,784 3 3
Carolina	14,058 14 6	11,003 12 4	25,062 6 10
Total	395,023 18 10	344,343 18 4	739,367 17 2

As the purchasing power of money in 1700 may safely be taken as five times what it now is, the value of the British trade with the American colonies was the equivalent of about $17,500,000 in the currency of to-day. On the basis of a colonial population of 300,000, this would give a per capita trade with Great Britain of $58 of our present money. Thus viewed, the commerce seems large; but the total trade of the colonies was much more valuable than these figures indicate, because they include only the commerce with Great Britain, while there was in addition the direct trade with the continent of Europe, some African trade, the large commerce with the West Indies, and the intercolonial exchanges. Indeed, the above figures probably understate the real value of the trade of the colonies with Great Britain. The customs-house officials, then even more than now, undervalued commodities; and that there was more or less of smuggling of goods around the customs offices is a well-known fact.

What the total value of the maritime commerce of the colonies was in 1700 can only be conjectured. It was, probably, from one and a half to twice the value of the trade with Great Britain, in the case of all the colonies except Maryland and Virginia, whose exports consisted mainly of tobacco that was nearly all sold in England and thence reshipped, in large part, to the Continent. The trade of New England included none of the enumerated articles, and the exchanges made in continental markets, in Africa, the West Indies, and in the other colo-

nies probably exceeded the trade with the mother country. And the same may have been true of Carolina during the seventeenth century, when the West Indian trade was relatively larger than it was after rice became her staple export. The imports into New England and New York from Great Britain were twice to five times the exports to the mother country, the coin and bills of exchange required to settle the unfavorable balance being secured mainly from the trade with other sections of the world.

The importance of tobacco in the external trade of the colonies is shown by the figures for Virginia and Maryland; 80 per cent of the entire exports to Great Britain in 1700 were from those two colonies. The imports of those colonies consisted largely, though not exclusively, of British goods, their purchases in the mother country amounting to half of the total for all the colonies in 1700.

By considering the trade of the several colonies or sections somewhat in detail, a more definite picture may be gotten of their commerce, despite the fact that, for reasons already stated, it will not be possible to present statistics either of volume or value.

NEW ENGLAND'S COMMERCE.

The colonies composing New England excelled the other colonies in diversification of industry and in range and variety (although not in value) of their maritime commerce. The chief commodities exported were fish, provisions, rum, forest products, and ships. The forest products and the ships found a welcome market in Great Britain; but, as fishermen and farmers, the people of New England came into competition with the people of old England, who protected themselves by "corn" laws, by duties on fish, and by the prohibition of the importation of salted provisions. The principal effect of British competition and protection was to enlarge New England's trade with the British and foreign West Indies, where sea and land products could be exchanged for a large variety of tropical products, especially sugar and molasses. This West Indian trade, as has been pointed out, enabled the distillery business to prosper in Massachusetts and Rhode Island, and indirectly made New England the chief center of the slave trade.

Economic conditions cooperated to build up the shipping of New England, and also to give her merchants the leading place in the intercolonial trade. The progress of New England brought into existence a tonnage of shipping, large for that time, first, because the sea, quite as much as the land, was the source of the living and of the wealth of the people. The conditions in this regard were totally unlike those of Virginia, where there was every incentive to till the soil and to ignore the maritime resources, and dissimilar to those in Pennsylvania and New York, where agriculture engaged the energies of the great majority of the population, but did not cause maritime pursuits to be seriously

neglected. In New England the vessel was as much a tool of industry as was the plough.

Another reason accounting for the relatively large shipping of New England and for her activity in commerce was the necessity of securing from the other colonies and the West Indies both goods and bills of exchange with which to obtain a part of her imports from Great Britain. The British market for New England's products being limited and subject to duties, double trading was necessary. To a large extent this was true of the middle colonies, but not of those south of Pennsylvania.

In the third place, both the maritime and mercantile interests of New England were promoted by the advantages which her location gave her merchants for engaging in intercolonial commerce, and for acting as middlemen for a part of the trade between the colonies and Europe. It was natural that New England and the tobacco colonies should have some trade with each other, despite the fact that, at that time, the northern farm and the southern plantation each supplied itself as fully as possible with its own food and crude manufactures. The radical difference in the products of the two sections made a limited trade profitable if not indispensable. Furthermore, it was especially easy for the New England merchant to engage in the intercolonial trade in connection with his West Indian business. His ships were sailing to and fro past the ports of the middle and southern colonies, and it was frequently profitable to combine intercolonial and West Indian trade. Many New England merchants had agents in the southern colonies.[1] In like manner, the merchants of New England supplied the other colonies, particularly the southern ones, with a part of their imports from Europe, and bought some of their exports for immediate or subsequent shipment to Europe. The traders of New England thus competed to some extent with the merchants of England for their indirect trade with America. The merchant in New England could act as middleman profitably not only because New England imported from Europe more than she exported thence, but also because the thriving ports of New England lay but little off the direct route from the southern colonies to Europe. It was natural that the commercially active towns of Massachusetts and of other northern colonies should become entrepots for a portion of both the eastbound and westbound trade of the southern colonies with Europe.

The external commerce of New England began with the trading of numerous small, and largely dissociated, towns directly with Europe and other regions; but as settlement increased, industry developed, and commerce grew, there came to be more intracolonial integration of trade, and the external commerce centered more largely, though by no means solely, at a few of the populous ports most advantageously situated, such as Boston, Salem, Newport, and New London.

[1] Bruce, *Economic Hist. of Va. in the Seventeenth Century*, II, 319–322.

The manufacturing activities of New England had a controlling influence upon the scope and volume of its external trade. Most of the goods were made for domestic consumption, and were produced in the homes, with the exception of milling products and the output of small factories and distilleries in the larger towns. Nevertheless, the total volume of manufactures was large enough to have the two marked consequences: (1) lessening the demand for European goods, thus causing New England to import far less of them than did the strictly agricultural colonies such as Maryland and Virginia; and (2) causing the importation of such materials as molasses, pitch, tar, and tools for use in manufacturing. Before the end of the seventeenth century the manufacturing tendencies of New England were so evident as to make the British manufacturers and traders deem it wise to have laws passed to seek to check colonial manufactures by confining their sale to local markets. That those laws were unnecessary and were of small effect has been pointed out in a previous chapter.

COMMERCE OF NEW YORK, EAST AND WEST JERSEY, PENNSYLVANIA, AND DELAWARE.

The trade of New York during the latter part of the seventeenth century was small, considering the early settlement of the colony and the present greatness of the commerce of the State. The reasons for the slow development, as has been pointed out, lay in the land system and trade restrictions established by the Dutch and continued, with modifications, by their English successors. The *hinterland* tributary to the port of New York until after 1700 was the valley of the Hudson River, a small part of the Mohawk basin, and the settled portion of East Jersey.

The exports from New York were composed mainly of furs, cereals, provisions, animals, staves, lumber, and whale oil. Like New England, though to a less degree, New York had a restricted market in Great Britain, and found the West Indian trade a necessary supplement to her commerce with Europe. The fur trade was large throughout the century, although it did not retain its early importance; the market was principally in Europe. During the entire colonial period the exports consisted chiefly of farm products, which were sent in part to Great Britain and largely to the West Indies, where flour, biscuit, beef, pork, bacon, and horses were regularly shipped. Lumber and staves were likewise sold both in Europe and in the West Indies. New York gained some importance towards the end of the century as a market from which whale-oil was shipped to the West Indies and to the neighboring American colonies. The intercolonial trade of New York was relatively small and was largest with New England, although it included a small volume of exchanges with the southern colonies. Taken as a whole, the export commerce of New York ranked between

that of New England and the southern colonies in the scope of articles and in territorial distribution. New York was subordinate to both New England and Virginia in volume and value of maritime trade.

Practically all of the external trade of the New York colony was handled through New York City. East Jersey, likewise, while under the political dominance of New York, handled its commerce through the same port. Until 1680, East Jersey was not permitted any other port of entry, and not until 1700 was it given control over its own customs duties. This was considered a serious grievance by the people of Jersey, and, without doubt, its commerce, like that of New York, was hampered by the export and import duties. It is hardly probable, however, that East Jersey would in any case have developed much foreign trade independent of New York before 1700. Until that time she was little more than a supply territory tributary to New York.

New York had some ship-building, but the colony ranked high neither in the building nor in the operation of shipping. Her commerce was carried on partly by her own merchants and partly by those of New England and Great Britain. Her people were more agricultural than mercantile or maritime in their ambitions: they permitted or perpetuated the heavy taxation of commerce; and, until near the end of the seventeenth century, little was done to foster and develop external trade.

West Jersey, Pennsylvania, and Delaware constituted an economic district whose commercial center was in the towns on the lower Delaware. By 1690, Philadelphia had secured the unquestioned leadership in the trade of the Delaware region. Burlington, settled in 1677, was the seat of government of West Jersey, and, for a time, was a rival of Philadelphia. It was an important local market for agricultural products, fairs were regularly held, and timber, lumber, and furs were exported. Gloucester and Salem were the other markets and shipping points for West Jersey, but the trade of all three of these Jersey cities was chiefly local. What they shipped out of the colony consisted principally of farm products and was sent mainly to Philadelphia, to be used in that market or to be exported abroad.

When Penn founded his colony at Philadelphia in 1681, there were several prosperous settlements on the west bank of the Delaware, among them New Castle and Fort Christiana (now Wilmington) in the Three Lower Counties, which in 1696 became the separate colony of Delaware. Another promising town was Upland (Chester). These early settlers on the right bank of the Delaware—Swedes, Dutch, and English—were thrifty farmers, raising a surplus of tobacco, cereals, and animals. The rapid growth of Philadelphia in population and trade gave the Lower Counties a good market, and they early became an important tributary to the commerce of Pennsylvania.

In 1686, five years after the founding of Philadelphia, there were 8,000 people in the province of Pennsylvania. The soil was fertile,

the Indians were friendly, and commerce was free of duties. The commerce with Europe was continuous from 1680 on, and the West Indian and intercolonial trades were well started within five years. The Pennsylvania forests were rich in furs, and the friendly relations with the Indians favored trading. The profits Maryland and Virginia had secured from tobacco culture caused tobacco to be grown in Pennsylvania. Thus it was that furs and tobacco were at first prominent among the exports, and the shipment of furs long continued, but, of course, in decreasing volume with the progress of the colony. Tobacco, however, soon gave way to cereal crops, and the chief exports came to be grain, flour, provisions, and lumber. The building of vessels for use in the commerce of the colony and for sale abroad was early begun. Penn's policy of encouraging agriculture, trade, and shipbuilding was thoroughly successful.

The trade of Pennsylvania with Europe during the seventeenth century—the first twenty years of the colony's existence—was not especially large, nor did it become notably valuable during the most of the first half of the eighteenth century. Two causes readily account for the fact that the prosperity of Pennsylvania did not necessitate a large commerce with Europe, as was the case with her neighbors to the south:

(1) Instead of trading almost solely with Great Britain, as Virginia and Maryland did, Pennsylvania had a well-distributed commerce, her products being exchanged for those of the other colonies and the West Indies as well as for those from Europe. As was true of the exports from New England and New York, some of the staple products of Pennsylvania competed with the industries of Great Britain, and could be sold in that country only by paying protective duties. This caused the merchants of Pennsylvania to follow the example of New England in developing trade with the West Indies and her sister colonies.

(2) Pennsylvania, and Philadelphia, the commercial center of the Delaware basin, had an expanding home market with the rapidly increasing population of the three colonies in the valley. To an exceptional degree, the natural resources and the diversified activities of West Jersey, Delaware, and Pennsylvania made of those colonies a self-sufficient economic unit. As the region developed and its industries became more specialized, a large external trade became profitable; but in the early decades there was less need than the other sections of America had of producing large quantities of goods to be shipped abroad to secure the commodities required to supplement the products of home industry.

COMMERCE OF MARYLAND, VIRGINIA, AND THE CAROLINAS.

References have already been made to the main characteristic of the commerce of Virginia and Maryland—the exportation of tobacco from their plantations and the heavy importation of British manufactures. All efforts to diversify their industries, even their agricul-

tural products, proved unsuccessful. In Maryland, however, as time went on, an increasing acreage of wheat was sown, but not until into the eighteenth century was there a surplus for export. The exports of both colonies prior to 1700 consisted of tobacco, furs, some forest products, and a small quantity of provisions.

Although the imports of Maryland and Virginia came mainly from England directly and in English vessels, some wine and British goods were brought from New England in the ships belonging to her merchants. Likewise the ships of the New England, New York, and Pennsylvania merchants were wont to call at Chesapeake ports on the way from the West Indies to exchange sugar and other tropical products for tobacco, furs, and hides.

The West Indian trade of Virginia,[1] which started in 1633, grew with the progress of the commercial intercourse of the northern colonies with the West Indies and with the increase in the requirements of the enlarging plantations for negroes, sugar, molasses, salt, ginger, and rum. During the seventeenth century these imports came mainly though not entirely from the Barbados and were paid for with tobacco, provisions, grain, and bills of exchange. This trade was carried on not only by the New England merchants, as described, but also to some extent directly by the largest planters, who at times personally or through agents made their purchases in the islands. There was also some casual trading done by ship-masters, who brought cargoes to Virginia and personally sold or bartered them at the plantation wharves instead of consigning the goods to authorized factors.

Maryland had no over-sea shipping of her own, and Virginia had practically none, both colonies depending upon the merchants of Great Britain and the northern colonies for the transportation required to handle their large commerce.

The most striking fact concerning the trade of Virginia and Maryland was its great value. The total external commerce of the two colonies in 1700 must have approximated £600,000 in value, the present money equivalent of which would be fully $15,000,000. This was an average annual per capita trade of £6, or $150 as measured in our currency. There are few countries at the present time whose foreign trade is as valuable per inhabitant as was that of the tobacco colonies 200 years ago. The foreign commerce of the United States in 1914 was about $42 per capita.

The trade of the Carolinas during the three decades following the settlement of Charles Town in 1670 was relatively small, and differed greatly from their trade in the eighteenth century, when rice and indigo had become the staple exports. In the seventeenth century, South Carolina traded quite as much, if not more, with the West Indies and with ship-masters, mercantile and piratical, seeking supplies, as with

[1]Bruce, *Economic Hist. of Va. in the Seventeenth Century*, II, 324–328.

the mother country. There was little, if any, commerce with the other colonies. As Professor Andrews[1] says: "Its isolation, southerly location, and the character of its economic life during the seventeenth century place it apart from the northern colonies, in a group with the English plantations in the West Indies." The early exports, consisting of the plantation products—corn, cattle, and pork—and the commodities obtained from the pine forests—pitch, tar, and clapboards—were sold to ship-masters for coin, or sent to the West Indies to exchange for sugar, molasses, rum, and ginger. A part of the articles thus obtained, together with some furs and cedar-wood, were sent to England to purchase manufactures.

The external trade of South Carolina, unlike that of North Carolina, centered almost entirely in one city, Charles Town, which, at the end of the seventeenth century, had become the most important port south of Philadelphia. It was the entrepot for the large territory occupied by the southern colonies; and its convenience as a port of call for the merchantmen of Europe and the northern colonies was of advantage to its external commerce and increased its sale of naval stores and ship supplies.

The progress of North Carolina in the seventeenth century in population, industry, and commerce was notably slow, partly because the government was badly managed, but largely because the Albemarle Colony was not favorably located for the production of the crops that were cultivated in the early years of the life of the settlement. The limited exports consisted of furs and tobacco, which were sold to the New England merchants. British ship-masters evidently did not consider the trade of Pamlico Sound to be large enough to be profitable, while the New England vessel could readily make a call in North Carolina while en route from the West Indies or South Carolina. In neither of the Carolinas did the people build or buy ships to carry on their commerce.

GENERAL SURVEY OF COMMERCIAL CONDITIONS.

At the close of the seventeenth century most of the American colonies had passed through the initial period of experiment. Settlement and growth had proceeded far enough to establish the lines of future economic progress, and the colonies were ready for the larger industrial and commercial development they were to have in the eighteenth century.

Political conditions were greatly improved when the period of misrule under the Stuarts came to an end with the dethronement of James II in 1689. The reorganization of the colonial governments during the next two years removed many of the hindrances to growth and prosperity. Moreover, the energies of William III were so absorbed by the great struggle with France that he gave colonial affairs comparatively little attention and thus left the colonies, in most matters, free

---

[1] *Colonial Self-Government*, 316.

to solve their new-world problems in their own way and to work out their own destiny by establishing such social, economic, and legal institutions as seemed to them best. What they did was to adapt British laws and institutions to American conditions. The results were most satisfactory, especially in the fields of industry and commerce. Great Britain had gained the commercial leadership of the world by the close of the seventeenth century, and her colonies in America achieved a commercial and maritime success even more notable than the triumphs of the mother country.

This does not imply that the mercantile system, as applied by Great Britain and the several colonies, is to be justified in all the details of legislation. Mistakes were made, but they were not fatal. Indeed, the British Acts of Trade, as applied to the colonies prior to 1764, did not seriously affect their economic development; and this was especially true of the two acts of commercial legislation adopted by Great Britain during the closing decade of the seventeenth century. The law of 1696 was an administrative measure designed to strengthen the acts of trade and to harmonize those laws with the commercial system of the mother country; but it contained no new principles and within a few years the enforcement of the law became lax. The British law passed at the close of the century (1699) restricting the sale of colonial woolen manufactures to the local market of the colony in which they were made had but slight effect, even in New England, where manufacturing was most largely developed.

Colonial trade, both domestic and external, in the seventeenth century, and in the eighteenth as well, was mainly barter. In none of the colonies was there coin enough to use as a medium in the majority of the exchanges. The leading standard coin was the Spanish silver "piece-of-eight," and it was not only of insufficient quantity, but, what was still worse as far as intercolonial trade was concerned, it had diverse ratings in different colonies. As is well known, tobacco was made the medium of exchanges in Virginia and Maryland, and it was almost the only standard of payment available in domestic commerce and in the payment of salaries and public and private obligations. In Massachusetts "country pay" in commodities at fixed rates of exchange was adopted to facilitate domestic trade.

The serious handicap put upon trade by the scarcity of coin, and the extreme difficulty of raising public funds, especially for military purposes, seemed to necessitate the issue of paper money. Fortunately, however, most of the experiments in credit money were postponed until the eighteenth century, although Massachusetts resorted to the issue of bills as early as 1690 to aid in financing Phips's expedition against Quebec. Other colonies followed the lead of Massachusetts, from time to time, with the disastrous results that always accompany attempts to give money value to promises to pay.

The ethics of trade and commercial life in America, as elsewhere, left much to be desired at the close of the seventeenth century. Moral

standards tolerated the slave trade, excused smuggling, looked with favor upon privateering, and scarcely condemned piracy. The difficulties of merchants and others in enforcing contracts and securing the payment of debts were another evidence of the persistence of the primitive morals of trade.

Piracy died hard, but the eighteenth century saw it end among the people of civilized countries, although it was after the opening of the nineteenth century that Europe ceased to tolerate it on the part of the inhabitants of the Barbary States. In 1700 and for some time thereafter the pirate ship was a welcome visitor at many American ports, and colonial officials were disposed to be considerate in their treatment of pirates, because they were liberal buyers of provisions and ship-stores, for which they paid good coin. The stringent law against piracy, passed by Parliament in 1698, was much needed, although its enforcement proved impracticable during the war of the Spanish Succession (1702–13), the days of the famous Captain Kidd. By 1720, however, the British navy had successfully driven the black flag from the ports of civilized nations and greatly restricted its ravages on the high seas.

It will, of course, not do to apply the rigid ethical standards of the present to the commerce of two centuries past. Indeed, there is yet much to be accomplished. The international slave trade persisted until long after the opening of the nineteenth century, and the domestic traffic in human beings ceased as late as 1865. Smuggling has always been, and still is, a besetting sin of Anglo-Americans, and probably of other peoples. Privateering is not now thought right; but naval vessels still make prizes of private shipping in times of war, as was the case in the recent war of the United States with Spain, and is the practice on a large scale in the present terrible conflict in Europe.

In no other fields of endeavor were the colonists more successful during the first century of their new-world life than in commerce; nor were there any other pursuits that made a stronger or more lasting impress upon American character than did the trading and the seafaring life of the merchants, mariners, and fishermen of the northern colonies. The plantation did much to mold the character of the southern colonists; and the ocean and the affairs of commerce had almost as much influence in determining the type of the New England Yankees. In the middle colonies, where both the agricultural and the maritime callings received about equal emphasis, a type of man developed intermediate between the trader and the planter. Racial types, it is quite true, are determined by more complex causes than this enumeration suggests; but the effect of economic occupation upon character is strong and unmistakable; and this was especially true of the influence which commerce had upon the people of America during the seventeenth and eighteenth centuries.

CHAPTER VI.

EIGHTEENTH CENTURY TO THE OUTBREAK OF THE REVOLUTION.

Effect of wars upon progress of American commerce, 84. Estimated population of the colonies in 1700 and 1760, 85. General industrial and commercial changes from 1700 to 1775, 86. The value and growth of the commerce of the colonies, (*a*) with Great Britain, 88, (*b*) with sections of world outside of Great Britain, 90. Value and distribution of trade of colonies in 1769, 92. Trade with the West Indies, 93. The Sugar Act of 1733 and its slight effect, 95. Illegal trading of the colonies during the Seven Years' War, 96. The illegal trade with the French at Monte Cristi, 98. Trade with West Indies after 1763, 99. The African slave trade, 100. Causes of the slave trade, 102. Commerce from the Peace of Paris to the Declaration of Independence, (*a*) value of exports and imports, 105, (*b*) prosperity of whaling and other fisheries, 106. Great Britain's bounties on hemp, masts, indigo, and naval stores, 106. Failure of British taxes on commerce of the colonies, 107. Monetary conditions as affecting commerce in the eighteenth century, 108. Summary, 110. Sources of statistical information concerning American colonial commerce, 112. Documentary sources and other references, 113. Statistics of exports from the colonies in 1770, 118. Statistics of the trade between Great Britain and the colonies, 1697 to 1776, 120.

The development of American commerce during the larger part of the eighteenth century took place under conditions that would to-day render international trade almost impossible; but, in spite of adverse circumstances, there was large and almost continuous progress. Had Great Britain been disposed, and had she been able, to enforce strictly the Acts of Trade, the commerce of her colonies must necessarily have been seriously hampered, mainly because the growth of the West Indian trade would have been checked; but serious effort to enforce those acts was postponed until within about a decade of the Revolution, and the attempt even then was largely unsuccessful. Indeed, the dozen years intervening between the peace of Paris and the battle of Lexington were the years during which the colonial trade reached its maximum value.

Four prolonged wars interfered with the peaceful progress of American commerce during the first sixty-three years of the century. The desperate struggles of European countries for political and commercial leadership were inevitably shared in large measure by the American colonies of Spain, France, and England, with the result that the ocean commerce of the colonies was for considerable periods of time subjected to the risks of warfare, privateering, and its natural accompaniment, piracy. The last and the most epoch-making of the four conflicts—the seven years war in Europe, called the French and Indian War in America—was, as far as England and France were concerned, a struggle for supremacy in India and America. It involved the colonies in active war; indeed, it was the victories of the British and colonial forces over the French in America that compelled France to turn over her vast possessions in America and India to Great Britain and to the shaping influences of British civilization.

Such a struggle as Queen Anne's War or the French and Indian War, if it were to occur to-day, when industry is organized with reference to a world market, and when the commercial interests of nations are so integrated and so sensitive as to cause every part of commerce to feel the shock of a blow received by any portion or section of the world's industry and trade, would have temporarily crippled American commerce; but the effect of these wars upon the industrial welfare of the colonies was in reality relatively slight. Production was carried on mainly to supply local markets; and although their commerce, which was largely maritime, was subjected to special dangers while the great commercial nations of Europe were at war, yet the colonial merchants continued to take the risks and to carry on an extensive trade, not only at friendly ports, but, either directly or indirectly, with the necessitous merchants of hostile countries.

The small sailing-vessels of the eighteenth century could make their way quietly from port to port without attracting the attention which is given the huge ocean ships of to-day, whose movements and whereabouts are heralded the world over by cable and telegraph and are recorded in all the large shipping centers. "The perils of the sea" were very real in the eighteenth and earlier centuries, and the merchant vessel was armed to defend itself against the attacks of pirates and privateers as well as against the men-of-war of hostile nations. The ship-master's dangers were increased by the outbreak of war; but he ordinarily did not decide to leave the sea; he preferred to continue to trade, and he merely sought to take a route as far as possible from known enemies. Thus it was that the maritime commerce of the colonies could prosper as much as it did from 1700 to 1763, although war prevailed during more than a third of the period.

That the colonies made steady and substantial progress during the first three-fourths of the eighteenth century, both industrially and as regards their maritime commerce, is an undoubted fact, although accurate statistical information is meager. A general measure of the advance made is afforded by the growth in population from 250,000 or 300,000 persons, black and white, in 1700, to about 1,600,000 in 1760—a five-fold or 500 per cent increase. The population could hardly have doubled each 25 years on an average and have been six times as numerous at the end as at the beginning of the period unless there had been nearly continuous prosperity. This rate of increase would not have been maintained if prosperous conditions had not attracted immigration and permitted a rapid natural increase in population. In none of the colonies was a census of population taken, and it is thus impossible to state exactly what the population of the colonies was, either at the beginning of the eighteenth century or in 1760. A careful estimate of the population of the colonies has been made by Mr. Franklin B. Dexter,[1] and upon the basis of Mr. Dexter's studies,

[1] "Estimates of Population," in *Proceedings of American Antiquarian Society*, 1887.

Mr. J. A. Doyle[1] estimates that in 1720 the population of the colonies, as a whole, included 339,000 whites and 96,000 blacks, a total of 435,000. The population of the colonies in 1760, according to the estimate of Professor Edward Channing,[2] "based upon the correlation of multitudinous figures taken from many sources," was as follows:

TABLE 2.—*Estimated population of the colonies in 1760.*

	Total.		White.	Black.
New England colonies	473,000	878,000	791,000	87,000
Middle colonies	405,000			
Southern colonies[1]	718,000	718,000	419,000	299,000
Total	1,596,000	1,596,000	1,210,000	386,000

[1]Maryland, Virginia, North Carolina, South Carolina, and Georgia.

GENERAL INDUSTRIAL AND COMMERCIAL CHANGES FROM 1700 TO 1775.

Few important changes occurred in the industrial activities of the colonies during the eighteenth century. Their industries, and consequently their commerce, were nearly as simple, both in organization and in the range of commodities produced, as they had been in the seventeenth century. Fur trading naturally declined as settlement proceeded, while the forest resources yielded relatively less and agriculture an increasingly greater share of the wealth produced. Indeed, the development and diversification of agriculture is the most salient fact regarding the industrial progress of the American colonies. This is, of course, what would be expected in a new country that was being settled and brought under cultivation. The colonists were first of all and chiefly engaged in farming, and because of this fact they had an extensive external commerce by means of which they sold their surplus abroad in exchange for goods not produced at home.

The inference to be drawn from the above generalization is not that many new agricultural products were introduced, but rather that in several, although not all, of the colonies a greater range of crops was grown. The introduction of indigo into South Carolina in 1741 or 1742 was an exceptional instance of the addition of a valuable agricultural staple. Indigo was not included by Great Britain in the list of "enumerated" articles, hence its foreign market was unrestricted; and in 1748 Parliament granted a bounty of sixpence a pound on all indigo imported into Great Britain from America. In that year, six years after its culture began, indigo accounted for one-tenth of the total value of the exports of South Carolina. Upon the outbreak of the Revolution nearly three-fourths of the British imports of indigo came from Carolina.

While Virginia continued throughout the colonial period to adhere closely to tobacco culture, Maryland raised not only tobacco, but also

[1]*English Colonies in America*, V, 484. [2]*History of the United States*, II. 491.

an increasing quantity of wheat, by which the local demand was supplied and a surplus amounting to 60,000 bushels per annum during the years immediately preceding the Revolution was exported, mainly from Baltimore. The development of cereal agriculture was most rapid in the Delaware basin, and Philadelphia became the leading grain and flour export center in the colonies, while the agricultural resources of the Hudson and Mohawk Valleys gave New York a rank second only to Philadelphia as a shipping point for grain, flour, and breadstuffs.

As stated above,[1] manufacturing in the colonies not only was limited mainly to the household stage of production, but also was kept within narrow bounds by the small supply of capital and by the fact that greater profits were obtainable from agriculture and commerce. Great Britain feared that the colonial manufactures of woolen goods, hats, and iron might limit the market for British goods, both in the colonies and elsewhere; but the stringent prohibitions upon these classes of manufactures in the colonies were probably more vexatious to the colonies than of revolutionary effect upon their industries. The southern planters made no effort to do more than to supply their plantations with such tools and fabrics as the slaves could make; and, while it is true that the people of New England, and to a less degree those of the middle colonies, sought to supply their local needs more and more fully as the eighteenth century advanced, their imports of manufactures continued to increase up to the eve of the Revolution. Colonial exports contained few manufactures other than rum, foodstuffs, forest products, and ships.

The industrial development of the colonies during the first two-thirds of the eighteenth century did not occasion any revolution in their external trade. Commercial expansion resulted chiefly from an increased export of a few staples, mainly agricultural products and fish, and the consequent larger purchase of foreign manufactures and tropical products. Tobacco was the staple that led all others in value; and it, supplemented by rice, indigo, and naval stores, caused the southern colonies to outrank the northern in volume and value of exports. In the middle colonies the increasing cultivation of cereals gave an expanding export of grain, flour, and biscuits, and made possible the growth and shipment of animals and meat products. In New England, as formerly, fish, rum, lumber, ship materials, and ships comprised a large share of the outbound trade; but animals and other farm products made up an important contribution to the total.

Likewise the import trade of the colonies followed, in the main, the lines of its early development. The commerce with the West Indies became of increasing importance to the central and northern colonies as the eighteenth century advanced, and grew to be so essential to their prosperity that the attempted enforcement of the Sugar Act

---

[1]See chap. iii, p. 45.

by Great Britain after the French and Indian War led quickly to an open and determined revolt of the colonists against the mother country. The intercolonial trade, unlike the trans-Atlantic and West Indian commerce of the colonies, did not greatly increase. The southern colonies traded directly and mainly with Europe, the only exceptions being that a minor share of their exports and imports was handled by New England merchants via the ports of New England, and that a part of the plantation supplies was furnished by the farmers and fishermen of the middle and northern colonies. The merchants of the middle colonies, as has been explained, traded with the West Indies and the home country, but had only a small share in the coastwise traffic. The New England traders, as leaders in ship-building and in the West Indian commerce, handled most of the coastwise commerce; but, for reasons elsewhere considered,[1] the economic necessity for a large intercolonial trade did not exist; and such development as might naturally have resulted from the growth of the colonies was hindered by the restrictive customs duties, shipping laws, and retaliatory measures which the jealousies and commercial rivalries of the politically dissociated colonies caused them severally to adopt.

VALUE AND GROWTH OF THE COMMERCE OF THE COLONIES.

The value of the commerce of the colonies during the eighteenth century prior to the Revolution and its rate of growth are illustrated in part by the figures presented by Burke in his memorable speech upon "Conciliation with America." The facts presented by Burke include the trade of Great Britain with her American colonies, both insular and continental, but do not give the value of the large imports into the continental colonies from the West Indies, and the value of the less important purchases from southern Europe and Africa. In spite of these limitations, Burke's statements are instructive.

"The trade to the colonies, taken on the export side, at the beginning of this century, that is, in the year 1704, stood thus:[2]

Exports to North America and the West Indies......	£483,265
To Africa..	86,665
	£569,930

"In the year 1772, which I take as a middle year between the highest and lowest of those lately laid on your table, the account was as follows:

To North America and the West Indies...........	£4,791,734
To Africa...	866,398
To which if you add the export trade of Scotland which had (in 1704) no existence.............	364,000
	£6,022,132

[1]See chap. x.

[2]The figures cited by Burke were said by him to have been taken, for 1704, from the original manuscript of Davenant, the first incumbent of the Inspector-General's office; the figures for 1772 "from official accounts kept for the information of Parliament."

"From five hundred and odd thousand it has grown to six millions. It has increased no less than twelve-fold (*sic*). This is the state of the colony trade, as compared with itself at these two periods within this century; and this is matter for meditation. But this is not all. Examine my second account. See how the export trade to the colonies alone in 1772 stood in the other point of view, that is, as compared to the whole trade of England in 1704:

The whole export trade of England, including that to the colonies in 1704	£6,509,000
Export trade to the colonies alone, in 1772	6,022,000
Difference	£487,000

"The trade with America alone is now within less than £500,000 of being equal to what this great commercial nation England carried on at the beginning of this century with the whole world!"

Burke further emphasized the growth of the export trade of Great Britain to her American colonies by referring to the trade of Pennsylvania: "In the year 1704, that province called for £11,459 in value of your commodities, native and foreign. This was the whole. What did it demand in 1772? Why nearly fifty times as much; for in that year the export to Pennsylvania was £507,909, nearly equal to the export to all the colonies together in the first period."

As was stated in the preceding chapter, the statistical information regarding colonial commerce is incomplete. The scope and limitations of the data obtainable from documentary and other sources are considered at length in the bibliographical note at the end of this chapter. A detailed table of the value of the trade between Great Britain and the American colonies from 1697 to 1776 is presented in table 8, appended to this chapter. A summary statement of the growth of Great Britain's trade, decade by decade, from 1700 to 1780, with the American continental colonies that became the United States, is made in table 3.[1]

TABLE 3.—*Imports from and exports to that part of America now the United States. Annual average per decade from 1700 to 1780.*

	Imports. £	s.	d.	Exports. £	s.	d.
Average from 1700 to 1710	265,783	0	10	267,205	3	4
1710 to 1720	392,653	17	1	365,645	7	11¼
1720 to 1730	518,830	16	6	471,342	12	10⅛
1730 to 1740	670,128	16	0	660,136	11	1½
1740 to 1750	708,943	9	6	812,647	13	0¼
1750 to 1760	802,691	6	10	1,577,419	16	2⅛
1760 to 1770	1,044,591	17	0	1,763,409	10	3
1770 to 1780	743,560	10	10	1,331,206	1	5

[1] This table is a copy of Appendix IX (24) of Lord Sheffield's volume *Observations on the Commerce of the American States*. I have used the sixth edition, published in London, 1784. While, in general, Lord Sheffield's statements and figures are not reliable, this table, compiled from official statistics, is presumably correct. Lord Sheffield, in this particular instance, would not be disposed to make the figures any larger than the facts allowed. I have elsewhere called attention to the probable undervaluation of commodities by the customs officers.

The figures quoted above from Burke included the value of Great Britain's export trade to all of North America and to the British West Indies, while those from Sheffield in table 3 refer solely to the colonies that became the United States. The relatively great value of the commerce of England with her "sugar islands"—British export trade with those islands normally exceeding that to the colonies on the continent of America—readily explains why the mother country was more solicitous for the welfare of the West Indian than for the continental colonies. Sheffield's table shows that until the fifth decade of the eighteenth century Great Britain's imports from the American colonies exceeded in value her exports thence, and that there was a large increase in the colonial market for British goods during the sixth and seventh decades, the two decades whose medial years were taken up by the French and Indian War, when Great Britain was both supplying the colonial markets and supporting the British troops that were fighting for the possession of Canada and the Mississippi country. It was the expanding trade of the colonies with the West Indies that enabled the colonists to buy so much more of Great Britain than they sold to her. According to Sheffield, as shown by table 4, the value of the exports from Great Britain to the "American States" from 1700 to 1773 exceeded the value of the imports hence by £20,193,568.[1]

TABLE 4.—*Balance of British exports to and imports from the American Colonies from 1700 to 1773.*

	Excess of exports.	Excess of imports.
	£ s. d.	£ s. d.
The four New England colonies	13,896,287 17 4¼	
New York, New Jersey, and Pennsylvania, including Delaware counties	16,941,281 9 4¾	
	30,837,569 6 9	
Virginia and Maryland		8,153,363 11 5½
North and South Carolina		2,611,671 13 10
Georgia	123,034 9 7	
Excess of exports to the provinces north of Maryland	30,960,603 16 4	10,767,035 5 3½
Balance or excess of exports to America over the excess of imports		*20,193,568 11 0½

*This excess of exports of the southern colonies was probably more than balanced by the number of slaves annually imported there by British merchants from Africa.

The trade of the continental colonies of America with sections of the world outside of Great Britain—with the British and foreign West Indies, Nova Scotia, and Newfoundland, the continent of Europe, and with Africa—naturally grew in importance with the industrial and commercial progress of the colonies. Toward the close of the colonial

[1] See *Observations on the Commerce of the American States* (6th ed.), 233, where table 4 is given.

period the Americans secured nearly 40 per cent of their imports and sold about 45 per cent of their exports by trading directly with sections other than Great Britain. If their indirect trade with the continent of Europe by way of England were included, these percentages, particularly the export percentages, would be appreciably larger.

Details regarding the trade of the colonies with countries and sections other than Great Britain are available for the five years beginning with 1768.[1] The second of these five years, 1769, which came midway between the Peace of Paris and the opening of the Revolution, may be selected as one fairly representing the trade conditions prevailing during the latter part of the colonial period. The colonial imports reached their maximum two years later, when Great Britain sent a large volume of supplies to New England to maintain her regiments; and the exports from the colonies attained the highest point in 1775, when the opening of hostilities and the certainty of war must have caused American producers to sell as much as possible before British warships and privateers made commerce impossible on the high seas; but the conditions of American trade in the seventies were so clearly abnormal that the year 1769 may well be taken for analysis.

The volume of the commerce of the colonies in 1769, and its territorial distribution, are roughly measured by the registered tonnage of the vessels that entered and cleared at the American ports during that year. The figures are presented in table 5.[2]

The tonnage of traffic carried was about 50 per cent greater than the vessel tonnage.[3] This would indicate that the cargo tonnage of the colonial imports in 1769 amounted to nearly 500,000 tons and that of the exports to somewhat more than 500,000, the total trade being equal to 1,000,000 tons of commodities. Although this figure is only an estimate, it probably is a fairly accurate one.

The value of this million cargo tons of commerce in 1769 and the distribution of the maritime trade of each colony among the different sections of the world are shown by table 6.[4]

---

[1]For explanation of this consult Note 1 on the Statistical Sources appended to this chapter.

[2]This table is constructed from parts of two tables in Macpherson's *Annals of Commerce*, III, 570 and 571. Macpherson speaks of this table and of the other I have reproduced below as "accounts copied from those of the customs house." His source of information would be the *Ledger of Imports and Exports, America, 1768–72*, to which reference is made in note 1 at the end of this chapter. As this table appears in Macpherson's work, however, the tonnage of entrances here given as from Southern Europe and Africa is given as from the West Indies, and that from the West Indies as from Southern Europe and Africa. There is little doubt but that these two columns were in some manner interchanged, as there is no reason for the enormous disparity between the entrances from, and clearances to, these two regions, such as Macpherson's table shows. The best proof that an error was made is that in the table for 1770, which Macpherson also gives, there is no great difference in the entrances and clearances. Furthermore, it is not likely that in 1769 it would take 94,916 tons of shipping to carry imports from Southern Europe and Africa, valued at only £228,682, while the exports thither, with a value of £573,014, required a tonnage of only 42,601.

[3]This is the estimate made by Macpherson, who takes for his authority Thomas Irving, who was "Inspector-General of Imports and Exports of North America and Register of Shipping." This ratio of gross register and cargo tonnage is the one that obtains to-day in ocean commerce.

[4]Macpherson, *Annals of Commerce*, III, 571.

TABLE 5.—*Gross registered tonnage of the vessels entered and cleared at the ports of each colony in 1769.*

Colony.	Entered from— Great Britain and Ireland.	Southern parts of Europe and Africa.	British and foreign West Indies.	Continent of America, Bahamas, etc.	Totals.	Cleared to— Great Britain and Ireland.	Southern parts of Europe and Africa.	British and foreign West Indies.	Continent of America, Bahamas, etc.	Totals.
New Hampshire.	915	480	9,500	5,551	16,446	2,822	170	12,878	3,874	19,744
Massachusetts...	14,340	6,595	17,898	27,618	66,451	14,044	5,102	17,532	26,988	63,666
Rhode Island...	415	226	5,958	10,237	16,836	540	863	6,060	10,312	17,775
Connecticut....	150	105	7,790	9,971	18,016	580	200	9,201	7,985	17,966
New York......	5,224	2,730	6,964	11,714	26,632	6,470	3,483	5,466	11,440	26,859
New Jersey....	....	25	257	654	936	....	....	555	538	1,093
Pennsylvania...	9,309	10,745	12,521	12,453	45,028	7,219	12,070	11,959	11,738	42,986
Maryland......	15,486	4,095	4,533	6,574	30,688	16,116	6,224	3,358	5,298	30,996
Virginia........	20,652	4,600	11,612	10,373	47,237	24,594	7,486	11,397	8,531	52,008
North Carolina..	6,415	700	6,702	9,259	23,076	7,805	1,030	6,945	7,333	23,113
South Carolina..	15,281	3,325	6,893	5,608	31,107	15,902	5,773	6,377	5,803	33,855
Georgia........	2,523	525	4,288	2,357	9,693	3,029	200	4,654	1,358	9,241
Total....	90,710	34,151	94,916	112,369	332,146	99,121	42,601	96,382	101,198	339,302

TABLE 6.—*Value in pounds sterling of the imports and exports of the several colonies, 1769.*

IMPORTS.

Colony.	Great Britain. £ s. d.	South of Europe. £ s. d.	West Indies. £ s. d.	Africa. £ s. d.	Total. £ s. d.
New Hampshire..	223,695 11 6	652 7 6	48,528 18 7	180 0	564,034 3 8
Massachusetts...		21,908 5 6	155,387 1 4		
Rhode Island....		2,580 19 6	56,839 17 3		
Connecticut.....		267 5 3	53,993 17 3		
New York.......	75,930 19 7	14,927 7 8	97,420 4 0	697 10	188,976 1 3
New Jersey......	....	326 18 2	1,663 19 9	....	1,990 17 11
Pennsylvania....	204,979 17 4	14,249 8 4	180,591 12 4	....	399,820 18 0
Maryland.......	714,943 15 8	4,683 2 3	32,197 13 9	5,400 0	851,140 6 6
Virginia.........		9,442 2 4	77,453 12 6	7,020 0	
North Carolina...	327,084 8 6	932 19 9	10,603 13 3	1,080 0	535,714 2 3
South Carolina...		6,166 6 1	65,666 4 8	124,180 10	
Georgia.........	58,340 19 4	547 7 7	9,407 9 9	13,440 0	81,735 16 8
Total.....	1,604,975 11 11	76,684 9 11	789,754 4 5	151,998 0	2,623,412 6 3

EXPORTS.

Colony.	Great Britain. £ s. d.	South of Europe. £ s. d.	West Indies. £ s. d.	Africa. £ s. d.	Total. £ s. d.
New Hampshire..	142,775 12 9	464 0 5	40,431 8 4	96 11 3	550,089 19 2
Massachusetts...		76,702 0 4	123,394 0 6	9,801 9 10	
Rhode Island....		1,440 11 0	65,206 13 2	7,814 19 8	
Connecticut.....		2,567 4 5	79,395 7 6	....	
New York.......	113,382 8 8	50,885 13 0	66,324 17 5	1,313 2 6	231,906 1 7
New Jersey......	....	....	2,531 16 5	....	2,531 16 5
Pennsylvania....	28,112 6 9	203,752 11 11	178,331 7 8	560 9 9	410,756 16 1
Maryland.......	759,961 5 0	66,555 11 11	22,303 9 2	....	....
Virginia.........		73,635 3 4	68,946 9 1	....	991.401 18 6
North Carolina...	405,014 13 1	3,238 3 7	27,944 7 9	71 15 4	569,584 17 3
South Carolina...		72,881 9 3	59,814 11 6	619 16 9	
Georgia.........	82,270 2 3	614 2 0	13,285 15 1	....	96,169 19 4
Total.....	1,531,516 8 6	552,736 11 2	747,910 3 7	20,278 5 1	2,852,441 8 4

Table 6 gives an instructive general picture of the trade of the colonies. Near the close, as in the earlier part of the colonial period, Maryland, Virginia, and the Carolinas were devoted to industries more dependent upon maritime commerce than were the industries of other sections. The trade of these four colonies accounts for over half of the imports and exports of all the colonies. The commerce of the five southern colonies was mainly with the mother country—in the case of Virginia and Maryland nearly seven-eighths, and in the case of the Carolinas three-fifths of the imports came from Great Britain. About seven-ninths of the exports from Virginia and Maryland and five-sevenths of those from the Carolinas went to Great Britain. Georgia made nearly two-thirds of her purchases and over five-sixths of her sales in the home country. New England, on the contrary, secured only two-fifths of her imports from Great Britain, her purchases in the West Indies being of greater value. As regards the exports, the distribution of New England's trade was even more striking, her shipments to Great Britain being only one-fourth of the total, while those to the West Indies comprised five-ninths. Likewise, New York's imports from the West Indies exceeded in value those from Great Britain, and of her total exports less than half were sent to the mother country. The distribution of the export trade of Pennsylvania is especially interesting. Comparatively little of her exports went to Great Britain, a large share, nearly half of the total, being sent to South Europe, where there was a good market for grain, flour, and provisions.

During the year covered by table 6, the colonies as a whole derived 61.1 per cent of the total value of imports from Great Britain, 2.9 per cent from Southern Europe, 30.1 per cent from the West Indies, and 5.7 per cent from Africa. Of the value of their total exports, 53.6 per cent went to Great Britain, 19.3 per cent to Southern Europe, 26.1 per cent to the West Indies, and 0.07 per cent to Africa.

Table 7, appended to this chapter upon pages 118 and 119, gives the quantity, value, and foreign distribution of each class of commodities from the colonies during 1770. Tobacco, of course, led all the other products in value, the second place being held by bread and flour, the third by fish, the fourth by rice, after which came whale oil and "fins," lumber in various forms, and wheat. The greater part of the total value consisted of the products of the sea, the farms, and the forests. Only small beginnings had been made in the exportation of iron, and the exported manufactures consisted almost entirely of foodstuffs and forest products. The transit trade of the colonies, made up of reexported tropical products, amounted to 2.5 per cent of the total.

TRADE WITH THE WEST INDIES.

Numerous references have been made in the preceding pages to the trade of the colonies with the West Indies and to its relation to the commerce with the mother country. This trade of the middle and northern colonies with the tropical or "sugar islands" was of funda-

mental importance to the commerical activities of the more northerly colonies and to the industrial life of all the colonies. A study of the West Indian trade is necessary to a knowledge of American colonial commerce.

Table 7 appended to this chapter shows that the colonial exports to the British and foreign West Indies at the close of the colonial period included a wide range of articles, their total value for 1770 being £844,178. Fish, Indian corn, wheat and flour, lumber, and live animals account for most of the value. The imports from the West Indies during the same year were appraised at £949,656, or £105,478 more than the exports. Over half of the total value of the imports was accounted for by the rum which came from the British islands. Molasses ranked next to rum, and of the £186,200 imported, less than 7 per cent came from the British islands. The sugar imports were valued at £168,000, and all but £49,000 worth of the sugar was from British ports. Rum, molasses, and sugar made up four-fifths of the value of the imports from the West Indies, and more than two-thirds of these articles came from the British islands. However, the trade of the American continental colonies with the foreign West Indies, although of less value than that with the British islands, was of almost equal importance to the American colonies, because, as we shall presently see, it was a necessary supplement and complement to the trade with the British islands.

The trade of the northern colonies with the West Indies was carried on regularly after the middle of the seventeenth century, and it naturally developed with the progress of the continental colonies and with the growth in the volume of their imports from Europe. The early trade was with the British West Indies, but later the industrial progress of the Dutch and more particularly of the French islands, gave rise to a commerce with them. The opportunity for trading with the French islands was especially favorable for the continental colonies, because of the unwise restrictions that France placed upon her trade with her colonies. In 1668, the French West India Company was granted a trade monopoly. Later the law was passed that prohibited the reexportation from France of the raw sugar imported from her colonies. The theory upon which this mistaken policy rested was that France ought not to supply her enemies with food. The importation of rum into France was also forbidden for the purpose of protecting French brandies from competition. Thus it came about that the price of sugar was often lower in the French than in the British West Indies, and that molasses could be bought at a very low price in the French islands, where, in the early part of the eighteenth century, it was at times actually thrown away as a waste product. The non-British islands, moreover, not only had export products to sell cheaply, but they also needed, although in much less quantity than did the British islands,

the fish, breadstuffs, live stock, and lumber which the New England and middle colonies could offer in trade.

Until 1717, when France adopted a more liberal colonial policy, her West Indies made but little progress; then, however, they began to have a good surplus, especially of sugar and molasses, for sale, and they began to compete so actively with the British islands in the trade with the American colonies that the British sugar-planters ere long were urging Parliament to shut the non-British islands out of the commerce with the northern colonies, and the Sugar Act of 1733 was adopted by Parliament in response to this demand.

During the two years that this measure was under consideration by the British government, the people of New England and the middle colonies sought unsuccessfully to make clear to Parliament what was in reality the fact that any restrictions upon the West Indian-American trade would be of no assistance to the British sugar-planters and would be an injury to both the American continental colonies and to the mother country. The gist of their argument, as paraphrased by Macpherson, was:[1]

"As all the sugar, rum and molasses of our sugar isles are taken off at high prices by Great Britain and the northern colonies, it would be very impolitic to obstruct the latter from taking molasses and even rum from the French islands, for the supply of their Indian trade, and much more of their fisheries; seeing our own sugar colonies are unable to supply the great quantity of molasses which those two trades demand; more especially as from the French islands they receive in payment silver and cacao, as well as molasses (but seldom sugar or rum), which silver comes ultimately to Great Britain to pay for the balance of trade; and the northern colonies distill the molasses into rum for the above purposes.

"By this trade the northern colonies are enabled to make such considerable remittances to England in ready money, as they could procure nowhere else but by their traffic with the foreign colonies, as well as by indigo, cacao, sugar, and rum, both from British and foreign colonies; for enabling them to pay for the great quantities of our manufactures which they yearly take of us."

However, the sugar-planters had the ear of Parliament, and the act of 1733 placed practically prohibitory duties of 9 pence per gallon upon rum, 6 pence per gallon upon molasses, and 5 shillings per hundredweight upon sugar imported into the colonies from the non-British islands. This was never enforced, and doubtless for the reason that the British planters soon came to see that its enforcement would not enlarge their trade with the northern colonies. Channing says: That "no sooner was the act passed than the sugar planters realized that it was the prohibition to take their sugars directly to the ports of the European continent that affected them."[2] Sugar, it will be recalled, was one of the "enumerated" articles which by the act of 1660 could be sold only in the English realm. Upon petition of the planters,

[1] *Annals of Commerce*, III, 174. [2] *History of the United States*, II, 521.

Parliament, by the acts of 1739 and 1742, took sugar out of the list of enumerated commodities, and in 1748 granted an export bounty on sugar refined in Great Britain from the raw product grown in the British plantations, and also allowed a drawback of the full amount of the import duty paid upon the raw sugar. The measures gave the British West Indies the assistance needed, and the act of 1733 was permitted to remain a dead letter.

During the forty years intervening between the close of Queen Anne's war and the French and Indian War, the trade of New England and the middle colonies with the West Indies developed without serious legislative interference with economic forces. The larger share of the commerce was with the British islands, whose population afforded the best market for the colonial exports and whose industries supplied most of the rum, much of the sugar, and many of the other tropical products bought by the merchants of the northern colonies for sale at home and for transshipment to Europe. Large quantities of molasses and some sugar were regularly obtained in the French islands, rum was purchased from the Dutch, and various tropical products were secured from all the non-British islands. The total import and export trade of the northern colonies with the several West India islands, British and foreign, was divided up among the islands year by year according to the prevailing conditions of production and prices.

When the Seven Years' War broke out and England and France entered upon their great struggle for the control of India and America, the commerce of the British colonies in America with the French West Indies ought theoretically to have come to a complete stop. That, however, was not what happened. The colonial merchants, instead of refusing to sell food to the enemies of the mother country in the West Indies, sold them what they needed for their own consumption and for supplying the warships of France. This disloyal action on the part of the American traders prevented Great Britain from fully controlling the West Indies, made the war more burdensome for her, and may doubtless have prolonged the struggle.

This action of the American merchants in continuing their trade with the French West Indies during the Seven Years' War illustrates forcefully the importance, and the profitableness to the continental colonies, of the commerce with the "sugar islands," foreign as well as British. As has already been indicated, "the West India trade was to a great extent the basis of industry in the northern continental colonies."[1] The war made this trade of greater rather than less economic importance, and the profits to be derived from selling lumber, fish, and provisions to the necessitous French colonies, and from buying sugar, molasses, and other tropical products in the glutted markets of those besieged islands, were far in excess of ordinary commercial gains.

---

[1] Beer, *British Colonial Policy, 1754–1765*, p. 128.

None of the colonial governments could openly justify this illegal trading with the enemy. All of the colonies were desirous of seeing Great Britain conquer France, because the French in Canada and their Indian allies from the lakes to the Gulf were a constant menace; but within three years after the opening of the Seven Years' War the success of the British in America seemed assured. Louisbourg and Fort Duquesne were taken in 1758, Quebec was captured in 1759, and after that event the American colonists had only such sentimental interest in the British struggle against France as was prompted by patriotism and loyalty.

The American colonies were in no sense disloyal in 1760, but, for manifest reasons, the imperialist sentiment in America was so weak as to be almost non-existent. To Pitt and the British statesmen who were guiding the destinies of the empire, France, wherever she had territory or power, was the enemy of Great Britain; while the average provincial American thought of the French in America as dangerous neighbors, but of the French in the West Indies as "an unfailing source of wealth."

The fact can not be denied, and is not to be forgotten, that the colonial merchant was strongly individualistic. He was resourceful and self-reliant, and his whole business training tended to make him more disposed to evade than scrupulously to comply with laws and rules which the State imposed on him and his affairs. Moreover, the American merchant could find in precedent an excuse, if not a justification, for this illegal trading. During the long war of the Spanish Succession "a large trade was carried on with France and Spanish colonies;" and later, during the war of the Austrian Succession, the trade of the British colonies with the French West Indies was so large as to have been one cause of the failure of the British naval operations in the Caribbean.[1] As a matter of fact, during none of these eighteenth century wars was Great Britain able to prevent illegal trading with her enemies.

The illegal trade with the French in the West Indies during the Seven Years' War was carried on not only by the continental colonies, but also by the Irish, who then exported provisions, and by the people of the British West Indies, who reexported to the French islands a part of the provisions they had imported. The governments of the British sugar islands, however, succeeded in stopping a large part of the illegal trading of those islands; and Ireland's exports were small in comparison with those from the continental American colonies.

The trading was accomplished in various ways. To some extent, the American vessels entered the French colonies directly from their home ports, this being done with the connivance of customs officers and the commanders of the French cruisers; but this method of procedure was too dangerous to be extensively followed. Another device

---

[1] Beer, *British Colonial Policy, 1754–1765*, p. 73.

for evading the law was for the master of an American colonial vessel to secure from the governor of his colony a pass permitting the vessel to proceed to a French island to exchange prisoners of war. The ship-master might, as a matter of fact, take some prisoners to exchange, or he might take none; his vessel was certain to take out a cargo of goods and to return laden with tropical products. Such vessels were called "flags of truce." Some of the colonial governors would not issue such passes, but in some colonies, notably Pennsylvania and Rhode Island, the ship-master had little if any difficulty in buying these permits. The "flags of truce," however, carried only a minor share of the traffic.

Most of this illegal trading was done through a neutral Dutch or Spanish port in the West Indies. During the early part of the war the Dutch ports of Curaçao, and more particularly St. Eustatius, were centers through which the trade with the French was conducted. The Dutch merchants at St. Eustatius, in buying the colonial goods, furnished the ship-masters "with forged or fraudulent landing certificates, which were used to cancel the bonds given in the British colonies not to take their cargoes to a foreign port."[1] As France did not allow foreigners to trade with her colonies in times of peace, the British prize courts held, under the "Rule of 1756," that France could not legally open her colonial ports to the Dutch "under pressure of war," hence the British navy, being supreme in the West Indies, seized numerous Dutch vessels trading with the French colonies; and the use of St. Eustatius as a neutral port became impracticable after 1758.

In 1759, Monte Cristi, a small Spanish "free" port on the north shore of Santo Domingo, became the chief center of the trade with the French. Monte Cristi was most favorably situated for this, because, although located on Spanish soil, it was close to the boundary of the French portion of Santo Domingo. This hitherto entirely insignificant settlement suddenly became a busy trade center, where the French secured both American provisions and military supplies, and also British manufactures, in exchange for sugar and molasses.

"This trade at Monte Cristi was carried on mainly by the New England and middle colonies, but it was by no means unknown in Virginia and in the West Indies. In addition, British subjects in England, Scotland, and Ireland were implicated in it, though to a minor extent. The trade assumed large proportions in 1759 and 1760. At times during these two years, over 100 North American vessels were at this port. In 1760, it was estimated that in that one year 400 to 500 vessels had taken in cargoes of French sugar and molasses."[2]

The extent of this trade and the nationality of the participants is concretely illustrated by the fact that on the 5th of February, 1759, his Majesty's sloop *Viper* found 29 ships ranging from 30 to 150 tons burden at anchor in the port, and of these 29 vessels, 28 were from the

[1] Beer, *British Colonial Policy, 1754–1765*, p. 93 (note). [2] *Ibid.*, 99.

North American colonies—from New York 7, Rhode Island 8, Connecticut 4, Massachusetts 8, Virginia 1, and Bermuda 1. Upon another date, two years later, 50 vessels were reported, 36 of them hailing from the continental American colonies—from Massachusetts 15, Rhode Island 10, New York, 9, Connecticut 1, and North Carolina 1.[1]

The extent of the trade with the French at Monte Cristi was well known by the admiral of the British West Indian fleet and by the commander of the British forces in America; and both were thereby seriously hampered in their operations. The exportation of food from the New England and middle colonies kept provisions scarce and prices high. A part of the supplies for the British troops had to be brought from Great Britain. The French colonies, meanwhile, were able to exchange their sugar and molasses for provisions in sufficient quantity to enable them to endure, without great hardship, the blockade of their ports by the British fleet.

As early as 1759, the British navy had attempted to break up the trade at Monte Cristi by capturing certain merchant vessels, but the courts had not supported the navy in making prizes of ships trading at a Spanish port. Two years later the making of captures was resumed, and the West Indian vice-admiralty courts then held the prizes to have been legally taken. This enabled the British navy temporarily to restrict the Monte Cristi trade. The business was not entirely broken up, and the following year, when Spain joined France in the war, traffic at Monte Cristi again became active. This finally, in 1762, roused Amherst, the British commander in America, to take the vigorous step of placing an embargo upon the trade of New England and the middle colonies. Amherst had hesitated for some time to adopt the plan of laying an embargo, because it injured the innocent trader as well as punished the lawbreaker; but the injury to commerce was not for a long period. The Peace of Paris brought the war to an end the following year.

The trade of the continental American colonies with the West Indies, foreign and British, was actively resumed in 1763; but Parliament, being confronted with a heavy debt, due largely to the Seven Years' War, was disposed neither to allow the colonies to ignore the Molasses Act of 1733, nor to permit them to continue to carry on an extensive commerce with various ports of the world practically tax-free. The well-known measures—associated with the names of George Grenville, Charles Townshend, and Lord North—for raising revenue by the amendment, extension, and rigorous enforcement of the Acts of Trade were adopted by Parliament in 1764 and the six succeeding years. As far as the trade with the West Indies was concerned, the change in the provisions of the Molasses Act and the steps taken to execute the modified law were the most important of the Grenville-Townshend acts.

---

[1] Beer, *British Colonial Policy, 1754–1765*, p. 98.

The duties imposed by the Molasses Act of 1733 (9 pence per gallon on rum, 6 pence a gallon on molasses, and 5 shillings per hundredweight on sugar) were too high to yield much revenue. The enforcement of the act would have stopped trade with the foreign West Indies, as was the intention of those responsible for the passage of the law. The law had yielded little revenue, because it was not enforced and was not enforceable. Until 1759, the law was practically ignored. The Sugar Act of 1764 was substituted for the Molasses Act, for the purpose of subjecting the trade with the West Indies to a law that could be made effective in yielding a revenue to be applied towards supporting the British military establishment in America.

By the Sugar Act, as passed in 1764, the importation of rum into America from foreign colonies was forbidden, the duty on foreign raw sugar was left at the old rate, and duty placed upon the refined articles was raised from 5s. to £1 7s. a hundredweight. The impost on foreign molasses, which was the commodity most largely purchased in the non-British sugar islands, was lowered from 6 pence to 3 pence a gallon. As the North American colonies could secure rum and sugar in large quantities from the British islands, their chief opposition to the Sugar Act of 1764 was to the relatively high import duty of 3 pence per gallon on foreign molasses, and their opposition was so vigorous and effective that at the end of two years the British Government changed the molasses tax from 3 pence per gallon on foreign molasses to the low rate of 1 penny per gallon, but levied this rate upon all of the articles imported, whether from foreign or British countries, this change being made at the same time that the still more obnoxious Stamp Act was repealed.

Grenville's vigorous measures to enforce the Sugar Act of 1764 were largely unsuccessful. The smuggling of molasses and other West India products continued, despite the zeal of the customs officers armed with writs of assistance and supported by the Vice-Admiralty Court. The authority of the British officials was denied, and when in 1765 the Stamp Act added fuel to the fire, the customs officers were successfully defied by mobs. The effect on the trade which the British merchants had in America was so disastrous that the British Government the following year sought to placate the colonies by repealing the Stamp Act and reducing the molasses duty. One effect of the reduction of duty on molasses to 1 penny per gallon was a diminution of smuggling and a large increase in the revenue derived from the duty.

THE AFRICAN SLAVE TRADE.

One important feature of the trade of the American colonies with the West Indies was the traffic in slaves, the account of which was omitted from the above discussion of the West Indian trade in order that the subject might be treated separately.[1] The traffic in African slaves was

[1] This account of the slave trade is based largely upon *The Suppression of the African Slave Trade*, by W. E. Burghardt Du Bois.

closely connected with the West Indian trade, because nearly all of the negroes purchased in Africa by the English, French, Portuguese, Dutch, and American slave traders for sale in the American market were brought first to the West Indies, the slave markets in which islands supplied both the sugar estates of the islands and the plantations of the continental American colonies. It was not until after the Revolution, when the trade of the United States with the West Indies was limited to the use of British ships, that the direct importation of negroes from Africa became frequent. Previously only occasional cargoes were imported directly. Throughout the colonial period, after the use of slave labor became general, negroes constituted a regular and important part of the export traffic from the West Indies to North America.

The merchants of Holland were the first to develop the West Indian slave trade on a large scale. During the first two decades of the seventeenth century several small Dutch companies began taking from Holland to Africa goods with which they secured negroes that were taken to the West Indies or Brazil and there exchanged for sugar. In 1621 these various companies united in the celebrated Dutch West India Company, to which Holland gave a monopoly of the American trade; and this company engaged so extensively and profitably in the African-West Indian slave traffic as to arouse the English to active competition. Although the first slaves sold in continental America—the 20 negroes purchased in Virginia in 1619—were brought by Dutch traders, the Dutch did not, as a matter of fact, engage to much extent in bringing the slaves from the West Indies to the American mainland. There was but little demand for slaves in New Netherland; and the majority of the Dutch slave ships held to the triangular route from Holland to Africa, Brazil or the West Indies, and thence home.

The English pushed the trade actively after 1630, and in 1672 the powerful Royal African Company came into existence and organized the traffic on a larger scale than it had hitherto reached. During the 20 years from 1713 (when Great Britain secured from Spain a monopoly for 30 years of supplying the Spanish colonies with slaves) until 1733, the English took 15,000 negroes annually to America, one-third being taken to the Spanish and two-thirds to the British islands. Later, the traffic reached larger figures, especially after 1750, when the Royal African Company was dissolved. Neither the exact number of slaves imported into the West Indies nor the percentage of them that were subsequently taken to the continental American colonies is known, because a large part of the traffic, unlike that carried in the British ships, was unregistered, being carried on in the ships of non-British European countries and of the American colonies. According to Du Bois: "It is probable that about 25,000 slaves were brought to America (the West Indies) each year between 1698 and 1707." The number then fell off, but rose after 1713 to "perhaps 30,000."

The number of slaves annually imported into the American colonies increased as the eighteenth century advanced. Bancroft places the

slave population of the continental colonies at 59,000 in 1714, 78,000 in 1727, and 293,000 in 1754. Bancroft's figures were probably conservative, the estimate of Doyle, as stated in the early part of this chapter, being 96,000 blacks in 1720. The estimate of Channing for 1760 was 386,000 negroes. In 1790, when the first census of the United States was taken, there were 697,877 slaves in the country. This steady growth in the number of the slave population in the continental colonies was due in part to natural increase, this being particularly true of the negroes in the Chesapeake colonies; and in the colonies further south, with the exception of the slaves on the rice plantations, the negroes lived under healthy conditions. The condition of the negroes was quite otherwise in the sugar islands, where the mortality was high and the importation of a large number of slaves each year was necessary.

The negroes brought annually to the continental American colonies must have averaged 10,000, and possibly much more than that number, during the 50 years preceding the Revolution. English ships imported about 3,000 into South Carolina each year from 1733 to 1766, and slaves were also brought by American and other traders.

There were five causes, economic and social, that accounted for the existence and growth of this traffic in human beings:

1. The planters in all the colonies south of Pennsylvania depended mainly upon slave labor and required an increasing number of negroes with the progress of each colony in industry and population. In Maryland alone of the southern colonies was there any dependence upon free labor, and there the slaves outnumbered the hired hands.

2. In the middle colonies, and to a small extent in New England, negroes were in demand as domestic servants, and were sometimes used for farm labor; but the number of slaves in Pennsylvania before the war did not exceed 11,000, and in New Jersey the maximum was less than half that figure. New York had a relatively large slave population amounting to 21,149 in 1774. The relative unimportance of slavery in New England is indicated by the fact that the maximum negro population in Connecticut was about 6,500, and in Massachusetts about 5,800. Little Rhode Island, on account of the active slave trade carried on at Newport, had only a thousand less slaves than did Massachusetts; whereas in New Hampshire slavery was almost nonexistent, there never having been as many as 700 slaves in the colony at any one time.

3. While the slave trader, and particularly the American slave trader, was not responsible for the existence of slavery in America, and was not the chief cause of its continuance and growth, yet the profits which American shipowners and captains derived from the traffic in African negroes caused them and the commercial interests in general to condone slavery throughout the colonial period, even in the northern colonies, and, except in Pennsylvania, to oppose successfully, until after the Revolution, the placing of any serious restrictions upon the slave trade.

The abolition of slavery by the northern colonies in most instances antedated the prohibition of the slave trade. The last anti-slave-trade laws to be passed by the colonial or State governments were those forbidding their citizens to engage in the traffic outside of the colony or State. Most of the northern colonies passed such laws before the end of the eighteenth century; but New York did not, and some of her citizens continued in the slave trade until the Civil War—of course clandestinely after the passage of the federal act of 1808.

4. The commercial interests of Great Britain, as well as those of America, were opposed to the colonial laws restricting the importation of negroes. From time to time the southern colonies felt, as did South Carolina as early as 1698, that "the great number of negroes which of late have been imported into this colony may endanger the safety thereof," and various steps were taken to mitigate the evil. Special encouragement was given white immigration; per capita taxes were placed upon imported negroes, the amount of the tax varying with the degree of public alarm. Occasionally this tax was made so high as to be prohibitive,[1] and in one instance, South Carolina in 1760, the importation was prohibited. This act of South Carolina was vetoed by the British government, as were numerous of the colonial laws imposing high duties on imported negroes, as for example, the Virginia acts of 1723 and 1727 and the Pennsylvania act of 1713 imposing a head tax of £20. Many similar laws were nullified by the veto of the royal governors or by the disapproval of the mother country. Indeed, the British slave-traders seem to have had no great difficulty in persuading the British government to check the efforts of the American colonies to restrict the slave trade.

5. Another economic reason, even more determinative than the profitableness of buying negroes in the cheap slave markets of Africa and selling to the slave-dealers and planters of the West Indies or the American continental colonies, accounting for the prominent place held by the slave traffic in the commerce of the northern colonies, was the intimate connection of this traffic with both the West Indian trade and with the rum-manufacturing business of New England. What this connection was can best be described by the account of the voyage and traffic of a typical slave-ship, the brigantine *Sanderson*, of Newport, Rhode Island. The vessel was fitted out from her home port in March 1752, having, besides the captain (a Mr. Lindsay), two mates and six men in her crew, and carrying a cargo of 8,220 gallons of rum and also some short iron bars ("African" iron), flour, pots, tar, sugar, provisions, shackles, shirts, and water. Upon reaching Africa the cargo was, with some difficulty, exchanged for slaves and for some gold dust and pepper. Captain Lindsay then proceeded to the Barbados, where he arrived June 17, 1753, and where he sold his cargo of 56 slaves, "all in helth and fatt," from £33 to £56 per head, and also disposed of 40

[1]For an account of these laws in each colony consult Du Bois, chapters 2–4.

ounces of gold dust and 8 or 9 hundredweight of pepper. The net proceeds of these sales above expenses was £1,324. From this sum the captain spent £911 17s. in purchasing 55 hogsheads of molasses and 3 hogsheads 27 barrels of sugar, the remainder due the captain being paid him in bills of exchange on Liverpool. From the Barbados the *Sanderson* returned to Newport, and her owners were so well pleased with the success of her captain that they at once fitted out another vessel and sent Captain Lindsay forth on another trip.[1] Most of the slave vessels like the *Sanderson* were small, their usual size being less than 100 tons.

Oftentimes the vessel that brought slaves from Africa to the West Indies would take slaves to the southern colonies and there purchase ship-building materials, or to more northerly colonies and exchange the negroes for staves and cooperage supplies. Many slaves were brought from the West Indies to Newport, which was a central market from which the colonies north and south were in part supplied with negroes. However, Newport, although it had the distinction of being the largest slave market, was only one of many ports from which the slave trade was carried on; Boston, Salem, New York, and many other places participated in the business. As distinguished a citizen of Boston as Peter Faneuil was the owner of a slave ship.

The African slave trade furnished the rum distillers of New England with one of their three principal markets. The home demand and the Indian trade doubtless gave them the largest outlet for their product; the exports to Africa probably ranked second in amount; while the fishing fleets provided the third market. The distillers as well as the traders of New England profited by the prosecution and development of the traffic in African negroes.

The opposition to slavery brought about the abolition of the institution in the middle and New England colonies during or shortly after the Revolution. The victory was won with comparative ease, because both the economic interests and moral forces of society were against slave labor in those colonies. Slave-holding was not profitable where small-farm agriculture prevailed, where skilled artisans were in demand, and where a goodly share of the population led the free and hardy life of fishermen and seamen. The extermination of the slave trade was more difficult, because powerful economic interests favored its continuance; but with slavery overthrown in the middle and northern colonies, it was inevitable that the moral sentiment against the traffic in human beings should soon prevail. Consequently the legalized slave trade had practically ceased before the close of the eighteenth century. Unfortunately, the trade did not stop, and as the traffic came to be condemned first by the moral sentiment of society and then by statute law, the horrors of the traffic increased. The worst days of the slave trade were the latter days.

[1]Du Bois, *Suppression of the African Slave Trade*, 28.

FROM THE PEACE OF PARIS TO THE DECLARATION OF INDEPENDENCE.

The trade revival that usually follows a war came in 1764, at the close of the French and Indian War. The remoteness of America in distance and time of ocean transit from the enemies of Great Britain, and the crippling of the French fleet by the British navy early in the struggle, enabled the continental American colonies to carry on the larger part of their commerce without serious interference; but the military operations in America unavoidably checked industry to some extent, and the risks of capture by privateers and French men-of-war must have been a deterrent to commercial undertakings.

That such was the case is evidenced by the fact shown in table 8, on pages 120 and 121, that the trade of all the colonies, with the exception of Virginia and Maryland, was noticeably larger in 1764 than it had been the two preceding years. As the export trade of Virginia and Maryland consisted almost entirely of tobacco, which could be sold only in the English realm, and as their imports were made up mainly of British manufactures, the Seven Years' War had not greatly affected their commerce, although the export figures of 1754 were not again reached until 1762, during which year there was a large expansion of both exports and imports.

Table 3, on page 89, giving the average annual value of the imports and exports of the trade of the colonies with the mother country for each decade from 1700 to 1780, shows that the yearly average was much the largest from 1760 to 1770; and this was so in spite of the undoubted curtailment of trade caused by the non-importation agreements with which the colonists sought to compel Great Britain to abandon her policy of enforcing the Acts of Trade and otherwise taxing the colonies. Had Great Britain continued, after 1763, the same liberal policy toward the trade of the colonies that she had followed prior to that time, the average annual value of her commerce with the American continent during the years following 1760 would have been much larger.

In one of the colonial industries there was a most notable expansion some time in advance of the formal treaty of peace in 1763. Promptly following the fall of Quebec and the crushing of the French power in Canada, American whalemen began operations throughout the Gulf of St. Lawrence from the lower course of the River St. Lawrence to and through the Straits of Belle Isle, a broad expanse of water that had hitherto been monopolized by the French, who were not so skillful as were the people of Nantucket in the destruction of whales. The whaling vessels sent out from Massachusetts to the Gulf of St. Lawrence increased from 10 in 1761 to 50 in 1762, and to 80 or more in 1763.[1] A larger exportation of whalebone to England immediately began, despite the high customs duty. At and prior to this time most of the whale products from continental America had been imported into Great Britain by the Dutch whalers, against whom the English had not made

[1] Weeden, *Economic and Social History of New England*, II, 746. (Weeden refers to Mass. Archives, lxvi, 243.)

much headway. For a long time the British Government had favored both English and colonial whalers in the fisheries off the coast of Greenland, both by permitting the whalers to import the bone secured in those waters duty free, and by granting a bounty on this bone. This liberal policy had been adopted to develop seamen for the navy. In 1764 Parliament, seeing that it would be possible to transfer the trade in whalebone from the Dutch to the British colonists in America, removed nearly the entire duty upon whalebone imported by British subjects. The consequence was that Holland forthwith lost the trade, and the Americans secured it.[1] In 1761 there were 27 hundredweight of whalebone imported into Great Britain directly from America, and 2,500 hundredweight from Holland; in 1764 the imports from America were 1,550 hundredweight and from Holland 73 hundredweight.

The cod and other fisheries were carried on more largely and more profitably upon the restoration of peace in 1763 and the elimination of the dangerous privateers. With the development of the cod fisheries there was an expansion of exports to the West Indies, a larger importation of molasses, and a greater output of rum. With an abundance of New England rum for export, and with the enlargement of plantation farming in the southern colonies, the conditions precedent and the incentives to the prosecution of the African slave trade were present. It seemed, in 1764, that both economic and political conditions favored the colonial fisheries, the West Indian and African trades, and the commerce with Great Britain—in a word, all the maritime activities of the colonies.

Nor was the British Government in any sense averse to a large development of American commerce. The King, Parliament, and people of the mother country believed as firmly as ever that the commerce of all parts of the empire should be so regulated as to maintain the principles of the mercantile theory; and they also thought the trade of the colonies as well as that of the realm should be taxed to meet the expenses of imperial defense. Subject to these two limitations, the larger the trade of the colonies the better it would be for the mother country as well as the colonies. Grenville did not set about to injure the colonial trade; on the contrary, several of his measures were intended to build it up.

In addition to favoring the colonial whale-fisheries, as explained above, bounties were bestowed in 1765 upon lumber imported into Great Britain from America, although colonial lumber had, since 1722, enjoyed preferential duties over that from foreign countries; and silk was added to the list of articles that had previously received bounties—hemp, masts, tar, pitch, turpentine, and indigo. It is true that the bounties on hemp and masts had had but little effect, and that silk was not successfully grown in America. The bounties had aided the southern rather than the northern colonies; but by the preferences granted in the duties on imports into Great Britain and

[1] Beer, *British Colonial Policy, 1754–1765*, pp. 218–221.

by the drawbacks given on goods reexported from the realm, the northern colonies as well as the southern were favored. The manner in which the British duties and drawbacks sought to foster as well as to regulate the trade of the colonies with the mother country has been explained in Chapter III. Grenville and Rockingham continued the policy of their predecessors and made further concessions.

It is well to keep in mind the facts just stated and to remember that the purpose of the mother country was to foster as well as to regulate and tax the commerce of the colonies. The regulatory action taken after the Peace of Paris consisted mainly of a stricter enforcement of the old Acts of Trade and the inclusion of most of the colonial exports among the "enumerated" articles that could be sold only in Great Britain or the colonies. It was inevitable that the British Government should some time seek to strengthen her administration of the colonies and to give validity to the laws regulating colonial trade, and in 1764 there were two impelling reasons for making the attempt at that time. Having decided that the expenses of governing, and particularly of defending, the widely separated portions of the empire were too heavy for Great Britain to bear without the aid of the colonies, the policy of taxing colonial trade and of enforcing the tax laws seemed logically the one to adopt. Moreover, the open and persistent trade of the colonies with the enemies of England during the Seven Years' War had impressed the mother country with the necessity both of enforcing the Acts of Trade and of extending the list of commodities that might be sold only in Great Britain and the British possessions.

Grenville seems to have been a man of a logical mind devoid of imagination; neither he nor his colleagues in the ministry had any conception of the difficulties they would meet with in regulating and taxing the colonial trade. The story of the successful colonial opposition to the plans adopted by ministry and Parliament to carry out the policy of trade regulation and taxation need not be repeated. We all know that the measures intended to develop certain lines of colonial industry and trade were more than negatived by the results of the concurrent attempts to tax American commerce; that the Sugar Acts of 1764 and 1766 could not be enforced; that the Stamp Act of 1765 resulted in riot instead of revenue, and was repealed in a few months; that the eloquent Townshend in 1767 could easily persuade Parliament to lay colonial impost duties upon various articles—glass, paper, painters' colors, red and white lead, and tea—but could not overcome the effect of the consequent colonial non-importation agreements; and that George III's irresolute and ill-informed premier, Lord North, found the temper of the colonists to be such by 1770 that they would neither permit taxed tea to be landed nor submit peacefully to the presence of British troops sent to maintain order in America. In a word, the attempt to regulate and tax colonial trade not only failed of its purpose, but resulted, in consequence of the fatuous administrative policy to which the King and his ministers blindly adhered, in the American

Revolution, and the political disunion of the two great national exponents of Anglo-Saxon civilization.

In studying the commercial as contrasted with the political effects of the British taxation of American trade from 1764 to 1770, the fact should be remembered that only a small portion of the trade was directly affected by the tax laws. The vigorous opposition of the colonies was not due to the throttling of American commerce nor to the crippling of industry. The years separating the Peace of Paris and the opening of the Revolution were not a period of hard times. Conditions in America were fairly prosperous. Had the relations with Great Britain been harmonious, industrial progress would have been more rapid, and maritime trade would have been larger; but, in spite of the limiting effects of the non-importation agreements, the commerce of most of the colonies, even with Great Britain, where the friction was greatest, reached its maximum in 1771 and 1772; and, in 1773 and 1774, the two years preceding the outbreak of hostilities, the commerce of the colonies with the mother country was larger than it was ten years previous. It was the principle of parliamentary taxation without representation rather than actual economic oppression, against which the American patriots made their determined stand. The American Revolution was fought to secure political liberty because it was felt that without political freedom the economic prosperity of the colonies could not continue.

MONETARY CONDITIONS AS AFFECTING COMMERCE IN THE EIGHTEENTH CENTURY.[1]

Throughout the colonial period trade both domestic and external was hampered by the absence of a uniform system of money current among the several colonies. Indeed, the monetary conditions were well-nigh chaotic; Massachusetts coined a limited quantity of "pine-tree shillings" from 1652 to 1686, but the colonies had no common currency of their own, nor were they able to obtain any considerable supply of English money—pounds, shillings, and pence. The total supply of metallic money in the colonies during the eighteenth century was not small, although it came far short of being adequate for business at a time when credit institutions were undeveloped. The coins were Spanish, Portuguese, and French, mainly Spanish. The exportation of coin from England was prohibited by law; but the statute was unnecessary as far as the American continental colonies were concerned,

[1]The history of money and banking is not attempted in this work, although there is a vital connection between commerce and both money and credit. Only a brief statement of the monetary conditions in the latter half of the colonial period is here deemed necessary. For a comprehensive treatment of the subject consult C. J. Bullock, *Monetary History of the United States*, and Henry Phillips, Jr., *Paper Currency of the American Colonies*. Special students of financial history will wish to consult the works dealing with the monetary history of single colonies, such as A. M. Davis, *Currency and Banking in the Province of Massachusetts Bay;* E. R. Potter and S. S. Rider on *Paper Money of Rhode Island* (in R. I. Hist. Tracts, first series, No. 8); W. Z. Ripley, *Financial History of Virginia* (in Columbia Univ. Studies, IV, No. 1), and other similar works of which several are in existence and in preparation. A good brief discussion of the colonial monetary system, with numerous references to sources of information, is contained in Edward Channing's *History of the United States*, II, 496–507.

because the continuous balances of trade in favor of Great Britain caused a steady flow of coin from the colonies to the mother country. The scarcity of current coin was a permanent condition in America.

Although the coins used were not English, prices were quoted in pounds, shillings, and pence, the ratios between the various non-British coins and English money being fixed, by business practices or by statutes, dissimilarly in the different colonies, to the serious detriment of intercolonial exchanges. The most generally accepted money basis in the colonies was the Spanish coin of 8 reals, "the piece of eight," which was equivalent to 4 shillings 6 pence English money; but in New York and North Carolina this coin was made equal to 8 shillings; in New Jersey, Maryland, Pennsylvania, and Delaware to 7 shillings 6 pence; in New England and Virginia to 6 shillings, and in South Carolina and Georgia to 4 shillings 8 pence. The difficulty of carrying on industry and commerce under these conditions may be readily imagined.

The supply of coin being insufficient to meet the needs of trade, two practices, begun in the seventeenth century, were continued in the eighteenth. One was the designation by law of some staple commodity as a standard of value. As is well known, tobacco took the place of money to a large extent in Virginia from the early years of the colony. Later, in 1730, the colony built warehouses in which owners of tobacco might store the commodity and receive therefor transferable notes somewhat similar to the silver and gold certificates now in circulation. At one time wheat certificates were current in Pennsylvania, and in New England public dues were, at times, made payable in specified products at fixed prices, while private contracts for the settlement of obligations in staple commodities were often made. These devices for doing business without the use of money were necessary, and, although they often entailed serious burdens upon creditor or debtor, they were of undoubted public benefit.

This, however, can not be said of the other means to meet the situation created by the inadequate supply of coin—the issue of paper currency, much of which was fiat money. As was stated in the preceding chapter, Massachusetts was the first to yield to the soft-money temptation, her original issue of paper notes being made in 1690 to pay the expenses of the unsuccessful expedition against Quebec. Subsequent emergencies led to numerous issues of paper currency, despite the opposition of the British Government and of the conservative residents of the colony. Carolina began the issue of paper money in 1702, New York in 1709, Rhode Island in 1715, and Pennsylvania in 1723. All of the colonies put forth various issues of paper notes, some colonies, as Pennsylvania, in a relatively conservative way that resulted in little harm; others, as Rhode Island, with a reckless disregard of the laws of trade and finance.

The paper currency issued by the colonies consisted in part of "bills of credit" or "treasury notes," the redemption of which was provided

for in the legislation authorizing the issues. Some of the colonies were conscientious in retiring the bills according to the terms of their issue, but other colonies were not; and most of the colonies indulged more or less in putting out irredeemable or fiat money. In part, also, this fiat currency consisted of small paper bills to provide retail trade with the necessary change, the need for which was very great. What the colonists ought to have done is what could hardly have been expected of them. They should have taxed themselves, purchased bullion, and issued coin or paper notes redeemable in coin or bullion; but capital seemed to them much too scarce to be tied up thus in the vaults of the colonial treasuries.

The desirability of having actual value back of paper notes was realized, and the not unnatural expedient was tried of establishing "land" banks with power to issue notes against mortgages upon land—the only kind of capital that was really abundant; but it goes without saying that such experiments were foredoomed to failure. Banking, public and private, in colonial times was too crude to create successful institutions of credit, let alone to provide a safe circulating medium—a much more difficult function to perform. It is, however, not surprising that the colonies resorted to the issue of paper currency when one considers the urgent need of a circulating medium and the practical impossibility of maintaining within the colonies an adequate volume of metallic money.

SUMMARY.

During the 75 years of the colonial period falling within the eighteenth century, American maritime commerce kept even pace with the economic progress of the several colonies. The deterrent effects of the long wars were relatively slight and of short duration. The laws of the mother country intended to secure to Great Britain the benefits of a monopoly of the international commerce of her American colonies were enforced in so far as their enforcement placed little or no actual check upon the development of America, but remained a practical dead letter as regards those branches of trade that would have been seriously restricted by giving validity to the laws. The commercial growth of the continental American colonies was in the main autonomous. The settlements in America were not economically a part of the English "realm;" they were colonies, and the British Acts of Trade did not change their status.

The industrial welfare of the colonies, in 1775, almost as much as in 1700, was dependent upon maritime commerce. The diversification of production had advanced somewhat further in the middle colonies than in New England or the South; but, even in the region between the Chesapeake and the Hudson, little headway could have been made without the free exportation of surplus commodities to the West Indies and the other continental colonies and the importation of Euro-

pean wares and supplies. In the southern colonies, where most of the population was engaged in growing staple agricultural products for export, progress was conditioned absolutely upon the steady increase in the volume of ocean commerce. The natural markets of southern products were in Europe. New England, the most maritime of all the colonies, drew her wealth mainly from the fisheries, the West Indian and African trades, the manufacture of rum, the construction of vessels, and their extensive use in the carrying trade of all the colonies. Agriculture yielded little for export, and some food was imported. Commerce was the very life of New England. When in 1774 the British Parliament, recognizing this fact, sought to force New England into submission by closing its leading port to the commerce of the world, the attempt was a failure, because the very severity of the measure united all the colonies in support of New England and in defense against an attack that threatened the political liberties and economic opportunities of every colony.

The West Indian trade, at the close of the colonial period, occupied as pivotal a position in the commerce of the colonies as it had held in 1700. Indeed, its importance had become greater. Throughout the eighteenth century to the time of the Revolution the commerce with the West Indies, foreign as well as British, had been of such vital consequence to the welfare of the middle and New England colonies that not even the great wars between England and France, though waged in America as well as in Europe and the East, had stopped traffic between the continental colonies and the foreign sugar islands. There was no general spirit of disloyalty in America from 1755 to 1763, although the imperial sentiment was weak. The insistence of the colonial merchants upon trading either indirectly or directly with the enemies of the mother country indicates that non-intercourse involved a greater economic sacrifice than their loyalty and patriotism prompted them to make. Of course, it should not be forgotten that France, especially after the fall of Quebec, seemed to the colonists to be a distant enemy, and the active foe rather of the British people in Great Britain and India than of those in America.

The connection between the maritime trade and the economic welfare of the continental American colonies was so close that the efforts made by Great Britain, shortly after the Peace of Paris, to carry out the principles of the mercantile system by enforcing the old Acts of Trade, and the policy of taxing moderately a portion of the external and internal commerce of the colonies aroused a degree of opposition in America out of all proportion to the actual burdens which the attempted regulation and taxation would have imposed. The colonists felt that any effective interference with their trade was fraught with serious consequences. They stoutly resisted the principle and policy of trade restriction, because the regulation and taxation of their commerce endangered their economic and political future.

NOTES.

1. SOURCES OF STATISTICAL INFORMATION CONCERNING AMERICAN COLONIAL COMMERCE.

The officials chosen by the colonies did not keep commercial records; but there were two classes of British officials in the colonies—the collectors of the customs and the naval officers—whose records and reports ought theoretically to contain detailed statistics of the exports and imports and of the shipping of each colony year by year. As a matter of fact, however, the existing files of the reports of neither class of officials contain an unbroken record of any one of the continental American colonies for the first seventy-five years of the eighteenth century, whereas information concerning the entire maritime commerce of these colonies as a whole is to be had only for a period of five years beginning with 1768.

The law required the British collectors of customs stationed at the colonial ports to make a quarterly report, but they were not held to a strict observance of the law. Their remittances were at least as irregular as were the uncertain means of communication with the home government, and probably much more so. During a large share of the time there was little effort made by the British government to enforce the Acts of Trade, and it is hardly to be doubted that this lax administration of the laws caused the collectors to exercise their discretion as to the completeness and regularity of their trade reports. However that may have been, the remissness of the collectors was rendered of little present consequence by a fire that destroyed the original reports of these officials nearly a century ago.

When, in 1767, Charles Townshend sought to make his revenue measures effective, he created a Board of Customs Commissioners to supervise the administration of revenue laws. The reports made by the "Inspector-General of Imports and Exports of North America and Register of Shipping" for five years from 1768 to 1772, inclusive, have been preserved in a volume entitled *Ledger of Imports and Exports for America, 1768–1772*, and the data for those years are just such as would be desirable, but are not to be had, for the entire colonial period.

For the years of the eighteenth century prior to 1768, the chief sources of information are the Naval Office Lists containing the reports made in accordance with the act of 1663 by the naval officers to the Board of Trade, while that body was in existence, and previously to the committee or council having supervision of trade and plantations. It is most unfortunate that these detailed reports of the naval officers, containing, as they do, a record by ports of each vessel entered and cleared, the character and quantities (but not the tons) of cargo, do *not*—at least as now preserved—cover every year and include all the colonies.[1] If such were the case, a fairly complete picture of American colonial commerce might be drawn, although, even then, it would be possible only to estimate, and that as the result of great labor, the number of cargo tons comprised year by year in the outbound and inbound maritime commerce of the colonies. The value of the trade was not reported by the naval officers, but by the customs officers, if at all. It was, accordingly

[1] Under the head of Board of Trade Papers in the Colonial Office Catalogue, Public Record Office, London, the Naval Office Lists cover the trade of the following colonies for the designated years: Carolina, 1716–19, 1721–35, 1736–67; Georgia, 1752–67; Maryland, 1689–1702, 1751–65, Massachusetts, 1752–65 (see New England); New England, 1686–1717; New Hampshire, 1723–69; New Jersey, 1722–61; New York, 1715–65; Virginia, 1700–06, 1725–70. In addition to the foregoing "lists," unconsecutive returns or lists are to be found scattered throughout the Board of Trade Papers; but these returns would probably only partially fill in the gaps of the lists covered by the above-named catalogue. Moreover, it will be noted that Pennsylvania and Delaware are not included in the foregoing list of colonies.

necessary to content ourselves with a partial presentation of the tonnage and value of American commerce during the period covered by this chapter, and the same situation obtained both as regards the seventeenth century and the years from 1775 to 1789. Fortunately, the facts for a period of five years shortly before the Revolution are available.

The records kept by the customs office in Great Britain contain the quantities and the values of the commodities composing the export and import trade of Great Britain with her several American colonies; and, to show the value and the fluctuations in that trade, a table is appended to this chapter on pages 120 and 121, giving the value of the trade of the mother country, year by year from 1697 to 1776, with the colonies as a whole, and also the trade with the usual subdivisions of the colonies—New England, New York, Pennsylvania, Virginia and Maryland, Carolina, and Georgia. The figures in this table, with the exception of the totals, were compiled in 1776, from the custom-house records, by Sir Charles Whitworth, a member of Parliament. The original report by Whitworth is in the Public Record Office, London, being Volume 623, Board of Trade Papers, Commercial Series II, and entitled *State of Trade of England in its Imports and Exports, 1697–1773, distinguishing each country. With preface and introduction. Written in 1776 by Sir Charles Whitworth, M. P. From Custom House and other official records.* This volume contains: (1) Imports and exports compared with balance of each country, 1697–1773; (2) trade of England arranged under the particular head of each country. In this volume figures for the trade with New England, New York, Pennsylvania, Maryland and Virginia, Carolina, and Georgia are brought down to 1801.

In 1776, Sir Charles Whitworth published a volume entitled *State of Trade of Great Britain in its Imports and Exports, Progressively from the Year 1697; Also of the Trade to each particular Country, during the above period, distinguishing each year. In two parts. With a Preface and Introduction, setting forth the Articles whereof each Trade consists.* This printed volume brought the tables down to 1773, but in the copy of this volume in the Library of Congress, Washington, the tables for the trade with New England, New York, Pennsylvania, Maryland and Virginia, Carolina, Georgia, and Florida have been continued, with pen and ink, from 1773 to 1801, the facts for these years having evidently been copied from the Board of Trade volume above mentioned. The Library of Congress volume also contains a manuscript table giving the "Statistics of the Number and Tonnage of Vessels between Great Britain and North America and the West Indies, 1771–1801."

Whitworth's tables of the value of Great Britain's export and import trade with New England, New York, Pennsylvania, Maryland and Virginia, Carolina, and Georgia were reproduced in a single consolidated table in the first issue of Hazard's *Register*, Vol. I, pages 4–5. Hazard's table, with the addition of columns and of totals, is the one appended to this chapter.

2. DOCUMENTARY SOURCES AND OTHER REFERENCES.

(A) *Documentary Sources in England.*—The chief sources of information regarding the commerce of the American colonies are in London and especially in the Public Record Office and the British Museum. The scope and general value of the documents in these and the other public collections in London are briefly but admirably stated by Professor C. M. Andrews, in his paper on "Materials in British Archives for American Colonial History" in the *American Historical Review*, X, 325–349 (1904–05). Detailed accounts of documentary materials in London are to be found in C. M. Andrews, *Guide to the Materials for American History, to 1783, in the Public Record Office of Great Britain.* Vol. I, The State Papers; Vol. II, Departmental and Miscellaneous

Papers (1914); and in Andrews and Davenport, *Guide to the Manuscript Materials for the History of the United States, to 1783, in the British Museum, in Minor London Archives, and in Libraries of Oxford and Cambridge* (1908). These three volumes constitute Publications Nos. 90 and 90A of the Carnegie Institution of Washington, D.C. The documents of greatest interest naturally are (1) those to be found in the Treasury Papers, particularly the series of Treasury Accounts, including the Quarterly Accounts; (2) the Colonial Office Records; and (3) the Board of Trade Papers, Commercial.

(1) The Custom House Accounts comprise 396 volumes covering the entire eighteenth century. In this series will be found information regarding the duties collected at the colonial ports and the customs revenues. Statistics of imports and exports, however, are not contained in the treasury accounts, with the exception of the years 1768–1772, inclusive, there being a *Ledger of Exports and Imports, America,* for those five years. In the Admiralty Documents, Miscellanea, there is a tabular statement of exports and imports for each colonial port for 1768–69. So far as I have been able to discover, these are the only systematic statistical tabulations of exports and imports for any portion of the entire colonial period.

(2) The Colonial Office Records in the Public Record Office contain two classes of documents, each of great value—the "Naval Office Lists" and the "Board of Trade Papers and Journals." The Naval Office Lists, spoken of here separately, although they are a part of the Board of Trade Papers and Journals, are reports made by the naval officers appointed by the governors for each important port, and contain detailed shipping returns, *i. e.*, the facts in regard to the entrances and clearances of vessels, the size of the vessel, and the kind and usually the quantity of cargo. The Naval Office Lists, however, give no information as to tonnage and value of cargoes carried into and out of the colonial ports. Moreover, the Naval Office Lists cover only a part of the colonial period, the returns being complete for none of the continental colonies.

(3) The most voluminous source of information regarding the details, other than statistical, of the trade of the colonies is to be found in the Board of Trade Papers and Journal comprising the governors' correspondence, entry books, abstracts of letters, minutes of council and assembly of the several colonies, records of grants of land, the Naval Office Lists (above described), and some custom-house accounts.

In addition to these Board of Trade Papers and Journals, there is another series comprising over 600 volumes discovered during recent years. This series is now known as the Board of Trade Papers, Commercial, and is divided into two series. As Professor Andrews says: these "two series of commercial papers must have been originally a part of the Board of Trade Papers." In most of these volumes the information contained is so indefinite as to make their value to students of commerce comparatively slight. There are some exceptions to this, however, notably volume 623, *Board of Trade, Commercial,* Series II, which contains an account of "State of trade of England in its imports and exports progressively from the year 1697; also of the trade of each particular country during the above period distinguishing each year. In two parts, with a preface and introduction setting forth the articles whereof each trade consists. 1776." This is the origin of the volume by Sir Charles Whitworth, to which reference is made below.

Some assistance to an understanding of the documents in the Public Record Office may be gained from reading parts of a paper by Louise Phelps Kellogg on "The American Colonial Charter," published in the *Annual Report of the American Historical Association for 1903,* I, 185–342. One section of this essay gives the history of the Board of Trade and Plantations and tells of its relation to the Colonial Office and to the Commissioners of Customs. The

Board of Trade and Plantations existed from 1696 to 1787. Until 1768 there were two Secretaries of State, one for the northern department and one for the southern department. The Board of Trade was subordinate to the Secretary of State for the Southern Department, who had jurisdiction over Irish and colonial affairs. In 1763 a third Secretary of State was created (for Colonial Affairs) and the Board of Trade became subordinate to that officer. After this time the Board soon became of little importance and, even before this, from the time of the close of Queen Anne's reign, it had little real authority and did not exercise much effective control in the administration of colonial affairs.

The Board of Commissioners of Customs, which had charge of the administration of colonial revenue acts, was established by the law of 1663. From 1670 to 1688 there was a Receiver-General of Customs. The following paragraph from Miss Kellogg's essay contains much information in a brief form regarding the customs officers, the naval officers, and their relations to each other:

"The Board's direct connection with the colonies was through the Governors who were instructed to correspond with the commissioners, and to send them, every three months, lists of clearances, and also reports of illegal trading. The governor's agent in matters of trade was the *naval officer* whom he was empowered to appoint, but who was required by 7th and 8th William III to give security to the commissioners of customs. The chief agents of the custom's board . . . . were the *collectors of the customs* whom they appointed for every port, and the *surveyors-general of customs*, of whom there were two in America, one for the southern and one for the northern department."

In addition to the manuscript documents in the Public Record Office and other depositories of London, there are numerous manuscripts and a large number of printed works in the British Museum. The most valuable is the Egerton No. 2395 collection, with which students of American colonial history are familiar.

The materials on commerce in the various public depositories in London were made the subject of a special report, prepared by Dr. Albert A. Giesecke, of Philadelphia. Dr. Giesecke's report, while incomplete, is valuable. It is in typewritten form, unpublished, a copy being in the Library of the University of Pennsylvania, Philadelphia.

(B) *Documentary Sources in the United States.*—Only a small part of the documentary material in the British archives has yet been or ever will be copied and brought to the United States. The most valuable collection of manuscript transcripts are:

(1) Board of Trade Papers in the library of the Historical Society of Pennsylvania, Philadelphia, as follows:

Board of Trade Papers—Proprieties, 1697 to 1776, 24 vols.
Board of Trade Papers—Plantations General, 1689 to 1780, 31 vols.
Board of Trade Journals, 1675 to 1782, 90 vols.
Stevens, *Facsimiles of Manuscripts in European Archives Relating to America, 1773 to 1783*, 25 vols.

(2) *Documents Relating to the Colonial History of the State of New York*, published in 13 volumes. The documents were selected and procured by John R. Brodhead, who acted as agent under the authority of an act of the State legislature of New York, passed in 1839. The papers were edited by E. B. O'Callaghan.

(3) *Colonial Records of North Carolina*, collected and edited by W. S. Saunders, vols. 1 to 10, 1662 to 1776 (1866 to 1905). Mr. Saunders's historical surveys introducing the volumes are of exceptional value to the student of general history.

(4) *Colonial Records of Georgia*, compiled by Allen D. Candler, vols. 1 to 17, 1732 to 1774 (1904 to 1908).

Most of the other original States have published the records and acts of their colonial assemblies. These records, however, contain few if any economic "documents," and very little, except laws, regarding commerce.

In the published colonial records of New York and North Carolina very little specific information concerning the volume of commerce as a whole or as regards particular commodities composing the commerce is to be had. Some idea may be gained as to the development of trade, the manner in which it was carried on, and the countries with which there were commercial exchanges. Naturally much is to be found regarding the evasions of trade laws, a subject that was constantly troubling the governors and customs officers. There were no statistical records kept in the colonies and consequently none will be found in the colonial records.

(C) *Statistical Sources.*—The original statistical sources regarding colonial commerce are practically confined to the volume above mentioned—*Ledger of Exports and Imports, America, 1768–1772.* Detailed but incomplete and untabulated statistical material regarding shipping and concerning the kinds and quantities of commodities exported and imported may be gathered from the Naval Office Lists. There are three secondary statistical sources readily available:

(1) Sir Charles Whitworth's volume entitled *State of Trade of Great Britain in its Imports and Exports, Progressively from the Year 1697; Also of the Trade to each particular Country, during the above period, distinguishing each year. In two parts. With a Preface and Introduction, setting forth the Articles whereof each Trade consists.* Information regarding the scope of this work and its origin is given above.

(2) The tables in Macpherson's *Annals of Commerce*, III, 570–573. For explanation of Macpherson's tables see footnote to table, page 119.

(3) The tables in the appendices to Lord Sheffield's *Observations on the Commerce of the American States*, London, 1783. Most of Sheffield's tables are confined to the trade between Great Britain and the colonies, but there are three tables not thus restricted. Appendix IV reproduces a table prepared by Thomas Irving, Inspector-General of the Imports and Exports of North America, and Register of Shipping, that gives an account of the imports into the North American colonies from southern Europe, Africa, and the West Indies. The figures in this table include all the provinces of North America, Newfoundland, Bermuda, and Bahama, and cover the year beginning January 5, 1770, and ending January 5, 1771. The chief articles and the value for each class of articles from each source are given. Appendix V gives a similar table presenting the quantity and value of articles exported from the colonies to Great Britain, Ireland, southern parts of Europe, Africa, and the West Indies. This table is also reproduced from a report by Thomas Irving and is for the year 1770–71. The third instructive table in the appendix to Sheffield's volume is the short one reproduced in this chapter, page 89, giving the average annual value of the exports and imports for each decade from 1700 to 1780, for "that part of America now the United States."

(D) *Contemporaneous Writings.*—Among the books upon commerce written during the eighteenth century from which the student of American history may derive some information are the following:

W. Wood, *A Survey of Trade, together with Considerations on our Money and Bullion.* (London, 1718.)

Joshua Gee, *The Trade and Navigation of Great Britain Considered.* (London, 1729.)

MALACHY POSTLETHWAYT, *Britain's Commercial Interest Explained and Improved. In a Series of Observations on the Several Branches of our Trade and Policy.* (2 vols., London, 1747.)

Ibid., Universal Dictionary of Trade and Commerce. (1757.)

JOHN DICKINSON, *Letters from a Farmer in Pennsylvania to the Inhabitants of the British Colonies.* (1769.)

JOHN LORD SHEFFIELD, *Observations on the Commerce of the American States. With an Appendix containing Tables of the Imports and Exports of Great Britain to and from all Parts, from 1700 to 1783. Also, the Exports of America, etc. With Remarks on those Tables, on the Trade and Navigation of Great Britain, and on the late Proclamation etc.* (London, 1784.)

RICHARD CHAMPION, *Considerations on the Present Situation of Great Britain and the United States of America, with a view to their Future Commercial Connections.* (London, 1784.)

GEORGE CHALMERS, *Introduction to the History of the Revolt of the American Colonies, being a Comprehensive View of its Origin from the State Papers in the Public Offices of Great Britain.* (2 vols., Boston, 1845.)

BENJAMIN FRANKLIN, *The Interest of Great Britain Considered with Regard to the Colonies.* (1761.)

EDMUND BURKE, *Speeches upon Conciliation with America and upon American Taxation.*

(E) *Recent Writings.*—

C. M. ANDREWS, *Colonial Self-Government.* (1904.)

W. B. WEEDEN, *Economic and Social History of New England.* (2 vols., Boston, 1890–1891.)

W. MACDONALD (Ed.) *Select Charters and other Documents Illustrative of American History, 1606–1775.* (New York, 1899.) Also, *Documentary Source Book of American History, 1606–1898.* (New York, 1908.)

E. B. GREENE, *Provincial America, 1690–1740.* (Amer. Nation Series, VI, New York, 1905.)

J. A. DOYLE, *English Colonies in America.* (5 vols., New York, 1882–1907.)

EDWARD CHANNING, *A History of the United States.* (Vol. I, 1000–1660; Vol. II, 1660–1760; Vol. III, 1761–1789; 1907–1912.)

WOODROW WILSON, *History of the American People.* (5 vols., New York, 1902.)

J. W. GARNER and H. C. LODGE, *The History of the United States.* (4 vols. Vol. I treats of the colonial period. Philadelphia, 1906.)

H. C. LODGE, *A Short History of the English Colonies in America.* (New York, 1881.)

H. W. ELSON, *History of the United States of America.* (One-volume edition, New York, 1904; same work in illustrated five-volume edition, 1905; in the five-volume edition the pre-revolutionary period is covered in Vol. I and the first chapter in Vol. II.)

E. M. AVERY, *A History of the United States and Its People.* (Vols. I–VII, Cleveland, 1904–1910.)

R. G. THWAITES, *The Colonies, 1492–1750.* (Epochs of American History, rev. ed., New York, 1897.)

G. P. FISHER, *Colonial Era.* (Amer. Hist. Series, New York, 1892.)

W. E. BURGHARDT DU BOIS, *Suppression of the African Slave Trade to the United States of America.* (1896.)

For detailed lists of historical works dealing with the eighteenth century, consult

CHANNING, HART and TURNER, *Guide to the Study and Reading of American History.* (New York, 1912.)

JUSTIN WINSOR, *Narrative and Critical History.* (8 vols., Boston, 1884–1889).

J. N. LARNED, *Literature of American History.* (Boston, 1902.)

A. B. HART (Ed.), *Source Book of American History.* (New York, 1900.)

The bibliographical notes in Channing and Doyle and in the various volumes of the American Nation Series contain many helpful references.

The general histories of the United States contain but little material for the student of industry and commerce.

TABLE 7.—*An account of the principal articles exported from all the British Continental Colonies, including the islands of Newfoundland, Bahama, and Bermuda, with the places to which they were sent, and their official value at the ports of exportation, during the year 1770.*[1]

Species of merchandise.	To Great Britain.	To Ireland.	To south of Europe.	To West Indies.	To Africa.	Total. Quantity.	Total. Value in sterling money. £	s.	d.
Pot ashes, tons	1,173	......	......	......	......	1,173	35,191	18	7
Pearl ashes, tons	737	......	......	......	......	737	29,468	10	7
Spermaceti candles, lbs	4,865	450	14,167	351,625	7,905	379,012	23,688	4	6
Tallow candles, lbs	......	......	1,630	57,550	240	59,420	1,237	18	4
Coals, chaldrons	......	......	......	20	......	20	25	0	0
Castorium, lbs	7,465	......	......	......	......	7,465	1,679	12	6
Fish, dried, quintals	22,086	450	431,386	206,081	......	660,003	375,393	17	0
Fish, pickled, bbls	123	25	307	29,582	31	30,068	22,551	7	6
Flaxseed, bush	6,780	305,083	749	......	......	312,612	35,168	18	1
Indian corn, bush	......	150	175,221	402,958	20	578,349	43,376	4	3
Oats, bush	......	......	3,421	21,438	......	24,859	1,242	19	0
Wheat, bush	11,739	149,985	588,561	955	......	851,240	131,467	0	10
Peas and beans, bush	......	......	1,046	49,337	......	50,383	10,076	12	0
Ginseng, lbs	74,604	......	......	......	......	74,604	1,243	8	0
Hemp, tons	86	......	......	......	......	86	129	11	3
Iron, pig, tons	5,747	267	......	......	......	6,017	30,088	10	0
Iron, bar, tons	2,102	85	273	3	......	24,064	36,960	17	3
Iron, cast, tons	......	......	......	2	......	2	32	13	11
Iron, wrought, tons	......	......	......	8	......	8	167	7	1
Indigo, lbs	584,593	......	......	83	......	584,672	131,552	2	0
Whale oil, tons	5,202	22	175	268	......	5,667	85,012	15	9
Whale fins, lbs	112,971	......	......	......	......	112,971	19,121	7	6
Linseed oil, tons	161	......	......	7	......	168	487	18	3
Copper ore, tons	41	......	......	......	......	41	853	13	0
Lead ore, tons	6	......	......	......	......	6	82	10	0
Bread and flour, tons	263	3,583	18,501	23,449	72	45,868	504,553	6	1
Meal, bush	......	......	......	4,430	......	4,430	443	0	0
Potatoes, bush	......	......	......	3,382	......	3,382	126	16	6
Beef and pork, bbls	......	......	244	tons 2,870	......	......	66,035	1	10
Butter, lbs	......	......	......	167,313	300	167,613	3,491	18	9
Cheese, lbs	......	......	......	55,997	......	55,997	933	5	8
New England rum, gals	600	7,931	45,310	2,574	292,966	349,281	21,836	0	0
Rice, bbls	74,073	......	36,296	40,033	117	150,529	340,692	15	0
Rough rice, bush	......	......	......	8,200	......	8,200	615	9	0
American loaf sugar, lbs	......	......	600	8,548	1,500	10,648	332	15	0

Raw silk, lbs.	541	......	......	......	......	541	541 11 3
Soap, lbs.	......	......	550	85,035	1,000	86,585	2,164 12 6
Shoes, pairs	......	......	......	3,149	......	3,149	393 12 6
Ship stuff, bbls.	......	......	7,327	640	......	7,964	9,958 15 0
Onions, value	......	......	£116 13 4	£6,378 16 1	......	......	6,495 9 5
Pitch, bbls.	8,265	......	......	822	57	9,114	3,200 8 0
Tar, common, bbls	78,115	......	......	3,173	134	81,422	24,426 12 0
Tar, green, bbls.	653	......	......	......	......	653	261 4 0
Turpentine, bbls.	15,125	......	......	1,807	82	17,014	6,805 12 0
Rosin, bbls.	195	......	......	28	......	223	278 15 0
Oil of turpentine, bbls.	11	......	......	30	......	41	102 10 0
Masts, yards, etc., tons	3,043	......	......	2	......	3,045	16,630 0 0
Walnut wood, value	£105 15 11	£9 0 0	......	......	......	......	114 15 11
Pine, oak, cedar boards, ft.	6,013,519	329,741	486,078	35,922,168	4,800	42,756,306	58,617 15 10
Pine timber, tons	10,582	50	64	315	......	11,011	4,404 14 5
Oak timber, tons	3,710	10	10	144	......	3,874	3,487 8 2
Houses, framed, No.	......	......	......	163	......	163	3,260 0 0
Staves and headings, No.	4,921,020	2,828,762	1,680,403	11,116,141	......	20,546,326	61,618 19 5
Hoops, No.	18,912	......	7,072	3,817,899	8,500	3,852,383	8,667 16 8
Shook hogsheads, No.	......	......	549	62,099	30	62,678	7,834 15 0
Cattle, No.	......	......	......	3,184	......	3,184	14,328 0 0
Horses, No.	......	......	......	6,692	......	6,692	60,228 0 0
Sheep and hogs, No.	......	......	......	12,797	......	12,797	4,478 19 0
Poultry, dozens	......	......	......	2,615	......	2,615	1,177 1 0
Furs, value	£91,485 14 9	......	......	......	......	......	91,485 14 9
Deer skins, lbs.	799,652	185	......	......	......	799,837	57,738 19 7
Tobacco, value	£904,981 14 0	......	......	£1,569 0 4	£87 3 9	......	906,637 18 1
Tallow and lard, lbs.	800	......	......	183,893	450	185,143	3,857 2 11
Beeswax, lbs.	62,794	10,980	50,529	1,820	2,400	128,523	6,426 3 0
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.		£ s. d.
Total value of articles shipped as American produce	1,686,654 4 6	114,078 13 6	685,920 6 4	844,178 14 9	21,381 16 6	......	3,356,159 10 2
Foreign merchandise, mostly from the West Indies	65,860 6 9	4,698 5 10	5,991 17 1	4,754 16 0	296 12 0	......	81,554 17 0
Total exports	1,752,514 11 3	118,776 19 4	691,912 3 5	848,933 10 9	21,678 8 6	......	3,437,714 7 2

[1]This table is taken from Macpherson's *Annals of Commerce*, III, 572–573. The same table in more detailed form constitutes Appendix V to Lord Sheffield's *Observations*. As presented in Sheffield, the table is apparently a literal transcription of an annual report by Thomas Irving, Inspector-General of the Imports and Exports of North America, and Register of Shipping. The report is dated at the Custom House, Boston, 1st of October, 1771. Appendix IV to Sheffield's *Observations* presents another report made on the same date by Thomas Irving, giving a detailed "Account of the Goods and Produce imported into the several Provinces of North America, the Islands of Newfoundland, Bahama and Bermuda," for the year 1770.

TABLE 8.—*Trade between Great Britain and the American Colonies from 1697 to 1776,[1] showing the exports from and imports into the then colonies.*

Year.	New England.		New York.		Pennsylvania.		Virginia and Maryland.		Carolina.		Georgia.		Total.	
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£
1697	26,282	68,468	10,093	4,579	3,347	2,997	227,756	58,796	12,374	5,289	......	......	279,852	140,129
1698	31,254	93,517	8,763	25,279	2,720	10,704	174,053	310,135	9,265	18,462	......	......	226,055	458,097
1699	26,660	127,279	16,818	42,792	1,477	17,064	198,115	205,078	12,372	11,401	......	......	255,442	403,614
1700	41,486	91,918	17,567	49,410	4,608	18,529	317,302	173,481	14,058	11,003	......	......	395,021	344,341
1701	32,656	86,322	18,547	31,910	5,220	12,003	235,738	199,683	16,973	13,908	......	......	309,134	343,826
1702	37,026	64,625	7,965	29,991	4,145	9,342	274,782	72,391	11,870	10,460	......	......	335,788	186,809
1703	33,539	59,608	7,471	17,562	5,160	9,899	144,928	196,713	13,197	12,428	......	......	204,295	296,210
1704	30,823	74,896	10,540	22,294	2,430	11,819	264,112	60,458	14,067	6,621	......	......	321,972	176,088
1705	22,793	62,504	7,393	27,902	1,309	7,206	116,768	174,322	2,698	19,788	......	......	150,961	291,722
1706	22,210	57,050	2,849	31,588	4,210	11,037	149,152	58,015	8,652	4,001	......	......	187,073	161,691
1707	38,793	120,631	14,283	29,855	786	14,365	207,625	237,901	23,311	10,492	......	......	284,798	413,244
1708	49,635	115,505	10,847	26,899	2,120	6,723	213,493	79,061	10,340	11,996	......	......	286,435	240,184
1709	29,559	120,349	12,259	34,577	617	5,881	261,668	80,268	20,431	28,521	......	......	324,698	296,626
1710	31,112	106,338	8,203	31,475	1,277	8,594	188,429	127,639	20,793	19,613	......	......	395,774	333,443
1711	26,415	137,421	12,193	28,856	38	19,408	273,181	91,535	12,871	20,406	......	......	426,090	439,666
1712	24,699	128,105	12,466	18,524	1,471	8,464	297,941	134,583	29,394	20,015	......	......	324,534	269,596
1713	49,904	120,778	14,428	46,470	178	17,037	206,263	76,304	32,449	23,967	......	......	365,971	309,691
1714	51,541	121,288	29,810	44,643	2,663	14,927	280,470	128,873	31,290	23,712	......	......	297,246	452,366
1715	66,555	164,650	21,316	54,629	5,461	17,182	174,756	199,274	29,158	16,631	......	......	457,471	425,333
1716	69,595	121,156	21,971	52,173	5,193	21,842	281,343	179,599	46,287	27,272	......	......	249,814	293,659
1717	58,898	132,001	24,534	44,140	4,499	22,505	296,884	215,962	41,275	25,058	......	......	303,222	284,556
1718	61,591	131,885	27,331	62,966	5,588	22,716	316,576	191,925	46,385	15,841	......	......	424,389	372,042
1719	54,452	125,317	19,596	56,355	6,564	27,068	332,069	164,630	50,373	19,630	......	......	463,054	393,000
1720	49,206	128,769	16,836	37,397	7,928	24,531	331,482	110,717	62,736	18,290	......	......	468,188	319,704
1721	50,483	114,524	15,681	50,754	8,037	21,548	357,812	127,376	61,858	17,703	......	......	493,871	331,905
1722	47,955	133,722	20,118	57,478	6,882	26,397	283,091	172,754	79,650	34,374	......	......	437,696	424,725
1723	59,339	176,486	27,992	53,013	8,332	15,992	287,997	123,833	78,103	42,246	......	......	461,763	411,570
1724	69,585	168,507	21,191	63,020	4,057	30,324	277,344	161,894	90,504	37,839	......	......	462,681	461,584
1725	72,021	201,768	24,976	70,650	11,981	42,209	214,730	195,884	91,942	39,182	......	......	415,650	549,693
1726	63,816	200,882	38,307	84,866	5,960	57,634	324,767	185,981	93,453	43,934	......	......	526,303	573,297
1727	75,052	187,277	31,617	67,452	12,823	31,979	421,588	192,965	96,055	23,254	......	......	637,135	502,927
1728	64,689	194,590	21,141	81,634	15,230	37,478	413,089	171,092	91,175	33,067	......	......	605,324	517,861
1729	52,512	161,102	15,833	64,760	7,434	29,799	386,174	108,931	113,329	58,366	......	......	575,282	422,958
1730	54,701	208,196	8,740	64,356	10,582	48,592	346,823	150,931	151,739	64,785	......	......	572,585	536,860
1731	49,048	183,467	20,756	60,116	12,786	44,260	408,502	171,278	159,771	71,145	......	......	650,863	536,266
1732	61,005	216,600	9,411	65,540	8,524	41,698	310,799	148,289	126,207	58,298	......	828	519,036	531,253
1733	61,983	184,570	11,626	65,417	14,776	40,565	403,198	186,177	177,845	70,466	203	1,695	660,631	548,890

1734	82,252	146,460	15,307	81,758	20,217	54,392	373,090	172,086	120,466	99,658	18	1,921	611,350	556,275
1735	72,899	189,125	14,155	80,405	21,919	48,804	394,995	220,381	145,348	117,837	3,010	12,112	652,326	668,664
1736	66,788	222,158	17,944	86,000	20,786	61,513	380,163	204,794	214,083	101,147	......	2,012	699,764	677,624
1737	63,347	223,923	16,833	125,833	15,198	56,690	492,246	211,301	187,758	58,986	......	5,701	775,382	682,434
1738	59,116	203,233	16,228	133,438	11,918	61,450	391,814	258,860	141,119	87,793	17	6,496	620,212	751,270
1739	46,604	220,378	18,459	106,070	8,134	54,452	444,654	217,200	236,192	94,445	233	3,324	754,276	695,869
1740	72,389	171,081	21,498	118,777	15,048	56,751	341,997	281,428	265,560	181,821	924	3,524	717,416	813,382
1741	60,052	198,147	21,142	140,430	17,158	91,010	577,109	248,582	236,830	224,270	......	2,553	912,291	904,992
1742	53,166	148,899	13,536	167,591	8,527	75,295	427,769	264,186	154,607	127,063	1,622	17,018	659,227	800,052
1743	63,185	172,461	15,067	134,487	9,596	79,340	557,821	328,195	235,136	111,499	2	2,291	880,807	828,273
1744	50,248	143,982	14,527	119,920	7,446	62,214	402,709	234,855	192,594	79,141	......	769	667,524	640,881
1745	38,948	140,463	14,083	54,957	10,130	54,280	399,423	197,799	91,847	86,815	......	939	554,431	535,253
1746	38,612	209,177	8,841	86,712	15,779	73,699	419,371	282,545	76,897	102,809	......	984	559,500	755,926
1747	41,771	210,640	14,992	137,984	3,832	82,404	492,619	200,088	107,500	95,529	......	24	660,715	726,669
1748	29,748	197,682	12,358	143,311	12,363	75,330	494,852	252,624	167,305	160,172	......	1,314	716,626	830,433
1749	39,999	238,286	23,413	265,773	14,944	238,637	434,618	323,600	120,499	164,085	51	5	633,524	1,230,386
1750	48,455	343,659	35,632	267,130	28,191	217,713	508,939	349,419	191,607	134,037	1,942	2,125	814,766	1,314,083
1751	63,287	305,974	42,363	248,941	23,870	190,917	460,085	347,027	245,491	138,244	355	2,065	835,451	1,233,168
1752	74,313	273,340	40,648	194,030	29,978	201,666	569,453	325,151	288,264	150,777	1,526	3,163	1,004,182	1,148,127
1753	83,395	345,523	40,553	277,864	38,527	245,644	632,575	356,776	164,634	213,009	3,057	14,128	962,741	1,452,944
1754	66,538	329,433	26,663	127,497	30,649	244,647	573,435	323,513	307,238	149,215	3,236	1,974	1,007,759	1,176,279
1755	59,533	341,796	28,055	151,071	32,336	144,456	489,668	285,157	325,525	187,887	4,437	2,630	939,554	1,112,997
1756	47,359	384,371	24,073	250,425	20,091	200,169	337,759	334,897	222,915	181,780	7,155	536	659,352	1,352,178
1757	27,556	363,404	19,168	353,311	14,190	168,426	418,881	426,687	130,889	213,949	......	2,571	610,684	1,528,348
1758	30,204	465,694	14,260	356,555	21,383	260,953	454,362	438,471	150,511	181,002	......	10,212	670,720	1,712,887
1759	25,985	527,067	21,684	630,785	22,404	498,161	357,228	459,007	206,534	215,255	6,074	15,178	639,909	2,345,453
1760	37,802	599,647	21,125	480,106	22,754	707,998	504,451	605,882	162,769	218,131	12,198	......	761,099	2,611,764
1761	46,225	334,225	48,648	289,570	39,170	204,067	455,083	545,350	253,002	254,587	5,764	24,279	847,892	1,652,078
1762	41,733	247,385	58,882	288,046	38,091	206,199	415,709	418,599	181,695	194,170	6,522	23,761	742,632	1,378,160
1763	74,815	258,854	53,998	238,560	38,228	284,152	642,294	555,391	282,366	250,132	14,469	44,908	1,106,170	1,631,997
1764	88,157	459,765	53,697	515,416	36,258	436,191	559,508	515,192	341,727	305,808	31,325	18,338	1,110,672	2,250,710
1765	145,819	451,299	54,959	382,349	25,148	363,368	505,671	383,224	385,918	334,709	34,183	29,165	1,151,698	1,944,114
1766	141,733	409,642	67,020	330,829	26,851	327,314	461,693	372,548	293,587	296,732	53,074	67,268	1,043,958	1,804,333
1767	128,207	406,081	61,422	417,957	37,641	371,830	437,926	437,628	395,027	244,093	35,856	23,334	1,096,079	1,900,923
1768	148,375	419,797	87,115	482,930	59,406	432,107	406,048	475,984	508,108	289,868	42,402	56,562	1,251,454	2,157,248
1769	129,353	207,993	73,466	74,918	26,111	199,906	361,892	488,362	387,114	306,600	82,270	58,340	1,060,206	1,336,119
1770	148,011	394,451	69,882	475,991	28,109	134,881	435,094	717,782	278,907	146,273	55,532	56,193	1,015,535	1,925,571
1771	150,381	1,420,119	95,875	653,621	31,615	728,744	577,848	920,326	420,311	409,169	63,810	70,493	1,339,840	4,202,472
1772	126,265	824,830	82,707	343,970	29,133	507,909	528,404	793,910	425,923	449,610	66,083	92,406	1,258,515	3,012,635
1773	124,624	527,055	76,246	289,214	36,652	426,448	589,803	328,904	456,513	344,859	85,391	62,932	1,369,229	1,979,412
1774	112,248	562,476	80,008	437,937	69,611	625,652	612,030	528,738	432,302	378,116	67,647	57,518	1,373,846	2,590,437
1775	116,588	71,625	187,018	1,228	175,962	1,366	758,356	1,921	579,349	6,245	103,477	113,777	1,920,750	196,162
1776	762	55,050	2,318	......	1,421	365	73,226	......	13,668	......	12,569	......	103,964	55,415

[1]These figures, except the totals, are from Hazard. *United States Commercial and Statistical Register*, I, 4-5.

CHAPTER VII.

PERIOD OF THE REVOLUTION AND CONFEDERATION, 1775-1789.

Indirect trade with Great Britain during the Revolution, 122. The effects of the war upon American trade, 123. Effect upon American shipping and ship-building, 123. Reasons why trade was chiefly with Great Britain after the Revolution, 125. Conditions affecting American commerce from 1783 to 1789, 127. British regulations affecting American commerce, 1783-1795, 128. Changes in destination and routes of American foreign trade, 130.

Both the non-intercourse agreements of the colonies that preceded the Revolution and the war itself necessarily restricted the over-sea commerce of America, because the trade of the colonies was mainly with Great Britain; but the interruption to trade was not especially serious after the first three years of the war. After 1778 foreign goods of great variety and of relatively large quantities were obtained by resort to privateering, and, fortunately for the American people, it was possible to continue to engage in foreign trade by sending traffic via roundabout routes to ports whereby the commodities exchanged became neutralized.

Macpherson states in his *Annals of Commerce* (Vol. III, 591) that a marked effect of the war was a great reduction of the direct trade between the thirteen colonies and Great Britain, and the growth of a large indirect trade, carried on through numerous circuitous channels. "The British, Danish, and Dutch islands in the West Indies were filled with British manufactures which were exchanged for American provisions, lumber, tobacco, and other products to the great emolument of the dealers on both sides." The statistics of exports at the ports of Great Britain indicated a large increase in the value of commodities sent to Nova Scotia during the period of the war, and it is probably safe to assume that many of these articles sent to Nova Scotians were subsequently smuggled into the United States. Moreover, for considerable periods of time during the war, New York, Carolina, and Georgia were under British control, and while such was the case, British merchant ships might enter from Great Britain and clear for that country.

The restoration of peace and the achievement of American independence changed the status of the foreign commerce of the United States. Before the war the greater share of the trade was with Great Britain, which, by the Treaty of Paris in 1783, became a foreign country. While the British Acts of Trade had hampered American commerce, they had also given British colonies many favors which foreign nations did not enjoy in trading with England and Scotland. When the United States became a foreign country most, although happily not all, of the special commercial privileges which Great Britain had previously granted were withdrawn.

The development of American trade during the years immediately following the Revolution was hindered by the political conditions

existing in the United States under the Articles of Confederation. The central government had no power to regulate commerce among the States, nor to provide an adequate revenue, nor to establish a sound monetary system. Our relations with foreign countries were no better, for though the central government could make treaties with foreign countries, it had no power to compel the States to live up to the treaties thus made. The country with which we had most of our commerce refused to treat with the United States, and our international treaties afforded but little assistance to the development of our foreign commerce prior to the establishment of the National Government under the Constitution.

The Revolution in America was fought to secure commercial and industrial freedom through the establishment of political liberty. The Revolution was caused primarily by the mercantile policy by means of which Great Britain sought to monopolize the trade of her colonies for the benefit of the people of the home country; and the occasion of the war was the vigorous measures taken by the British Parliament after 1763 to enforce the Acts of Trade with a view to making the colonial commerce the source of revenue to be applied towards supporting the administration of the British Government in the colonies. The immediate occasion of the break between England and America was the contest over the policy of making colonial commerce a source of revenue. While the American colonies disliked the policy of trade monopolization and sought when possible to evade the Acts of Trade, they did not seriously question the merit and justice of the general commercial policy of Great Britain. The Americans, however, or at least a majority of them, did object to having the trade of the colonies taxed by the British Parliament. The Revolutionary War was fought to secure freedom of trade and to obtain home rule in the levying of taxes for the support of the government.

EFFECTS OF THE WAR UPON TRADE, SHIPPING AND SHIP-BUILDING.

The over-sea trade of the American colonies at the outbreak of the Revolution and the effects of the war upon that trade, for reasons that were stated in Chapter VI, can not be measured with strict exactness. For six years ending in 1774, the annual average value of the exports from the United Kingdom to the thirteen American colonies, according to official British statistics, was £2,732,036. The annual value of the exports for the six years ending in 1789 was £2,333,643, the annual average for the latter six years being £398,393 less. During the six years ending in 1774 the average annual value of the imports into Great Britain from the thirteen American colonies was £1,752,142; while for the six years ending in 1789, the annual average was £908,636. The average for the latter six years being £843,506 less per year than for the previous period, it would seem that the British market for

American goods during the six years following the Revolution was only about a little over one-half what it had been during the six years before the Revolution. Most of this large decrease in the exports of the United States to Great Britain can be accounted for by the smaller quantity of rice and tobacco exported. Before the Revolution the colonies had a monopoly of the British market, American tobacco supplied the British trade, and was distributed from London to many parts of Europe. Indeed, four-fifths of the tobacco sent from the colonies to Great Britain was reexported to other countries. During and after the war, however, tobacco from other sections of the world was admitted to the British trade and largely supplanted the American article. Moreover, it is to be borne in mind that the Revolutionary War compelled the temporary shifting of much of the over-sea trade of the colonies from Great Britain to the Continent, and that it took British merchants a few years subsequent to the war to regain the commerce that had been diverted from them. During the six years between the close of the war and the establishing of the government under the Constitution, Great Britain recovered the trade that had been lost. For reasons cited in this chapter, the American foreign trade continued to be mainly with Great Britain.

As regards the proximate effects of the Revolution upon American shipping, it is certain that the seven years of warfare must have been injurious to all classes of shipping that engaged in the trade of the United States with Great Britain, that between the United States and the West Indies, and that employed in the general carrying trade of the commerce of the world. British shipping increased during the war, while American tonnage fell off largely; but in view of the fact that all ships, whether built in America or in Great Britain, were under the British flag before the Revolution, it is difficult to determine just what effect the separation of the colonies from the mother country had upon the shipping employed in the trade between the United States and Great Britain, although it can not be doubted that the shipping engaged in the trade between America and Great Britain must have become mainly British as the result of the Revolution. This would naturally be so, because of the fact that the larger share of the tonnage engaged in that trade before the war was owned and operated by British merchants. American shipowners and traders, however, suffered chiefly from the closing of the West India ports to American vessels by the Treaty of Paris in 1783. The greater part of this large and profitable shipping was changed from American to British by Great Britain's policy of enforcing the Acts of Trade against American shipping.

Some indication of the effect of the Revolutionary War upon the American shipping interests in general may be gathered from the statistics of the shipping employed in the commerce of Great Britain before and after the Revolution. Before the Revolution the commerce

of Great Britain as a whole employed 7,694 vessels; of which, 2,342 were built in America, 4,092 were of British build, and 1,260 were constructed in foreign countries. At the close of the war the commerce of Great Britain employed 7,580 vessels; of which, only 1,126 were of American build, 3,562 were of British construction, and 2,892 were secured from foreign countries. The immediate effect of the war was not to increase the British-built ships in the merchant marine of Great Britain, but to substitute foreign-built vessels for those constructed in America. Champion is authority for the statement that the tonnage employed in the commerce of Great Britain as a whole amounted to 1,300,000 tons. He estimates that the tonnage of ships built in America was in the ratio to the tonnage of those built in Great Britain as 23 to 40 before the war, and of 11 to 35 after the war. Otherwise stated, more than one-third of the British merchant marine consisted of American-built vessels before the war, and the relation after the war was that less than one-fourth of the total was of American construction.

Before the Revolutionary War ship-building was carried on much more economically in America than in Great Britain. As Lord Sheffield states: "The Americans were, before the Revolution, rapidly increasing in the carrying trade, and, considering our situation and circumstances, we had comparatively little of it." After the Revolution, however, British shipping was steadily supplanting the American vessels in the world's general carrying trade. The war had reduced the tonnage in American ships; it had restricted their use in the trade of Great Britain and in the commerce between the United States and that country, and had closed the entire British West Indies to shipping owned in the United States.

REASONS WHY TRADE WAS CHIEFLY WITH GREAT BRITAIN AFTER THE REVOLUTION.

Although the people of America fought the war for political liberty in order that they might thereby secure freedom from British restraints upon American commerce, independence did not permanently divert the foreign trade of the United States to non-British countries. By the Treaty of Paris, Great Britain became to the United States a foreign country whose policy, like that of all nations, was to favor its own ship-owners and merchants, but the commerce of the United States tended to be carried on increasingly with Great Britain instead of the Continent. It was supposed by the people of the United States that, when they were free from the restraints of British trade monopoly, they would rapidly develop commerce with other European countries. This, for several reasons, did not happen:

In the first place, the fact that the colonial trade had been mainly with the mother country tended to cause the commerce of the United States to remain with Great Britain. American and British traders

knew their markets and were disposed to continue to trade in the commodities and in the markets with which they were familiar.

Another reason that tended to produce the same result was that American commerce, not only in colonial times but after the Revolution, was carried on very largely by the aid of British capital. There was a scarcity of capital in America, and merchants in the United States traded with British merchants whose supply of capital enabled them to extend the necessary credit to American traders after, as well as before, 1783.

Moreover, the foreign trade of America continued to be mainly with Great Britain after the war of independence, because British traders understood American business conditions much better than French, Dutch, and Spanish traders did. The people of Great Britain knew what goods were wanted in America. The common language of the two peoples and their common blood contributed to the development of their commerce with each other.

Again, Great Britain was developing in industry more rapidly than was the continent of Europe, and hence was not only a better market for exported foods but was also able better to supply America with the manufactures which the people of the United States required. When the British monopoly of American trade was terminated by the Revolution and the staple articles of export from America were no longer "enumerated," but were free to go to any market in the world, there proved to be little demand for the articles outside of Great Britain, where they had previously been sold.

Another contributory cause of the permanence of Great Britain in the American trade was that in France, the most natural rival of Great Britain in the American trade, the political situation prevented the growth of a large foreign trade.

Lord Sheffield gives another reason why the Americans failed to develop a large trade in Europe outside of Great Britain. The Americans, he states, "have so few articles to send to Sweden or indeed to any part of the North, that all the articles for the Baltic may be imported through Great Britain to greater advantage than directly from those countries if a drawback should be allowed on such articles." In other words, Great Britain was naturally the emporium and distributing-point for the trade of America with Europe. It was so at that time; it has remained so to a large extent ever since.

One other reason that may be noted as in part accounting for the control of American trade by Great Britain after the Revolution was that many, if not most, of the staple articles of manufactures desired by American buyers were made better in Great Britain and sold more cheaply there than in continental Europe. As an illustration of this, Lord Sheffield cites the fact that "when France granted a sum of money to Congress for clothing the American troops, Mr. Laurens, Jr., was

employed to provide it; but instead of laying out the money in France he went to Holland and bought English cloths and sent them to America."

The period intervening between the close of the Revolution and the establishment of the National Government under the Constitution has, until recently, been pictured as an especially depressed period of American industry and commerce. The necessitous economic conditions were considered to have been due mainly to political causes, to remove which the Constitution was framed and put into operation. It is true that for a part of the period the economic conditions were unfavorable and that the causes were partly political. In general, it may be said that the Revolution was followed by a brief period of over-trading which led in 1785 to a business depression that by 1789 had given way to prosperity.

The interference of the Revolution with the foreign commerce of America was greatest during the first three years of the war. When the war broke out, colonial warehouses, for the most part, contained few foreign goods, because of the agreements which the colonists had made during the pre-revolutionary controversy not to purchase British goods. Although commerce with England was prohibited both by Great Britain and by the American States, trade was carried on indirectly, and goods were secured by capturing British merchant vessels to such an extent that, from 1778 to the end of the Revolution, foreign goods could be obtained in most American markets. All kinds of manufactured goods that had been imported from abroad prior to the war were scarce from 1775 to 1778 and prices were correspondingly high, but from 1778 on there was an increasing volume of imports, and American manufactures developed rapidly.

During the latter half of the seven years of the revolutionary struggle the people of the United States were fairly prosperous. Indeed, Channing[1] says: "The thirteen States . . . achieved their independence by preserving their economic well-being, while the contest with the sea-trading nations of continental Europe had sapped England's strength for the moment."

CONDITIONS AFFECTING AMERICAN COMMERCE FROM 1783 TO 1789.

Industry and commerce were hampered by the absence of a good monetary system. The paper currency issued by the Continental Congress rapidly depreciated in value after the first year, and, had it not been for the fact that local trade was mainly barter or the exchange of farm products at the stores for manufactures, the degree of prosperity that prevailed during the latter part of the war period would not have been possible. The most serious hindrance to commerce and industry was the lack of land-transportation facilities. Food

[1] *History of the United States*, III, 388.

might be plentiful in one section and scarce in a neighboring section. The serious effect of there being no good roads was particularly felt by the army, which suffered from the lack of clothing, food, and other supplies when the articles needed were abundant in parts of the country not distant from the army. Of course, the poor provisioning of the continental army was in part due to the bad currency system and to the poverty of the Government, but the chief difficulty was the lack of transportation.

At the time of the close of the war, agriculture was being carried on in most parts of the country under practically normal conditions. Difficulties were encountered and risks were incurred in exporting agricultural products, but this handicap upon agriculture was partly offset by the excellent market furnished by the British and French armies, who paid gold and silver for the commodities they purchased. According to Channing,[1] "at the end of the war people were living in unwonted ease" as the result of the prosperity in agriculture and the increase in foreign commerce during the latter half of the war.

It was natural that trade should have been exceptionally active during the two years following the war. Foreign manufacturers and merchants eagerly pushed their sales in America as soon as peace was restored. American manufacturers, who had built up their industries during the war period, expected larger sales both at home and abroad, but they soon realized that their foreign trade was subject to greater restrictions than had prevailed prior to and during the war, and they also found it impossible to hold the domestic markets for the manufactured goods that competed with imported articles. Imports entered the country in enlarged volume, buyers purchased freely, consumption expanded, and credit was unduly extended. Reaction and liquidation soon followed and business depression prevailed during 1785. From 1786 to 1789, business gradually recovered; domestic industry and foreign commerce revived, and, by the summer of 1789, the maritime trade, as measured by the statistics of vessel entries, had become as large as it ever had been.[2]

Although after the Peace of Paris the American merchants found themselves to be foreign traders in British ports and that France and Spain no longer granted American commerce the special favors that had been accorded while the war was being waged against their commercial rival (Great Britain), some helpful privileges were still enjoyed except in the British West Indies. The principal foreign market was in Great Britain, where some goods from America received certain concessions, though not all that the new American nation hoped to receive; yet American commerce had a somewhat more favorable place in British markets than was enjoyed by the commerce of other countries.

---

[1] *History of the United States*, III, 397, 403. [2] *Ibid.*, 414.

BRITISH REGULATIONS AFFECTING AMERICAN COMMERCE, 1783–1795.

An analysis of the British regulations affecting American commerce, as they prevailed from 1783 until they were changed by Jay's treaty in 1795, will indicate the conditions under which American commerce was carried on with Great Britain and the British possessions during the years succeeding 1783. The British government refused to make a commercial treaty with the United States and adopted the plan of regulating the trade with the United States by proclamations issued from time to time by the Privy Council. The first of these proclamations was made in 1783, when it was stipulated:

(1) That goods from the United States might be imported into Great Britain in American or British ships, *i. e.*, the United States was in this regard placed upon the same footing as were European nations.

(2) Unmanufactured goods, except fish-oil, whale-fins, blubber, spermaceti, and also pig iron, bar iron, tar, pitch, turpentine, rosin, pot ashes, pearl ashes, indigo, masts, yards, and bowsprits produced in the United States might enter Great Britain by paying the same duties as were levied on such goods from British possessions in America. Fish-oil, blubber, whale-fins, and spermaceti paid the same duty when the articles were imported from the United States as was paid when the commodities came from other non-British countries. All woods except masts, yards, and bowsprits entered Great Britain free from the United States, whereas they paid small duties when imported from Europe. It will thus be seen that in certain minor particulars the American exports to Great Britain were then given greater privileges than were accorded commodities exported by the countries of continental Europe.

(3) Goods imported into Great Britain from the United States in American vessels did not have to pay the "alien," *i. e.*, additional, duty imposed upon goods brought in the vessels of other non-British countries.

(4) The trade between the United States and the British West Indies was restricted entirely to British shipping. Naturally, this regulation, which imposed a most severe restriction upon American commerce as well as upon American shipping, was strongly resented by the people of the United States. The restriction, however, was founded upon the long-established laws of Great Britain that since the middle of the seventeenth century had forbidden any goods to be exported from or imported into the British possessions in Asia, Africa, or America unless carried in British ships, manned by British seamen.

This policy of keeping the British West Indies closed to all but British shipping was not abandoned by Great Britain until 1828. Jay's treaty as negotiated provided for the admission of American vessels of 70 tons burden or less, but that provision was rejected by the American Congress. Viewed from the standpoint of Great Britain,

it is hard to see why the trade of the British West Indies should have been opened in 1783 to American shipping. The chief interest Great Britain had in the American colonies was that they would strengthen the mercantile and naval power of Great Britain. By achieving their independence the American colonies had reduced the power of Great Britain upon the seas. There were strong reasons why Great Britain should endeavor to increase her naval and mercantile strength.

There was no doubt that the opening of the West Indies would result in the practical exclusion of British shipping from the large trade between the United States and the British West Indies. The traffic would certainly have been handled mainly in American ships sailing back and forth between the United States and the islands, or sailing from America to the West Indies and from the West Indies to Europe and from thence to the United States. On the other hand, by confining the trade between America and the West Indies to British ships, vessels could load out from Great Britain to America with British exports which would make at least part cargoes; could then secure full cargoes in American ports, at profitable freight rates to the West Indies, where a large volume of export traffic to Great Britain could be secured. Freight rates were low from Great Britain to the United States, but were high to the West Indies from Europe. There is no doubt that the monopolization of the trade of the British West Indies by British shipping strengthened the British marine and put it in better shape for the struggle which followed at the close of the century in the great wars with France.

Much has been written concerning the evasions of the British prohibitions of the trade with the British West Indies in ships under American registry. It was possible for American merchants to use American ships to a considerable extent by resorting to fraudulent registration papers and by trading by way of non-British West Indian ports; but in spite of these evasions, the trade with the West Indies did not increase during the period between the Peace of Paris and the establishment of the National Government under the Constitution. Great Britain and other European countries succeeded in diverting to their own ships much of the commerce that, without restrictions, would have been handled in American ships by merchants in the United States. The development of American trade during the five years ending with 1789 was due not to the growth of the West Indian trade, but to the reestablishment of the commerce with Great Britain, and to the building up of a new trade with the Mediterranean and with the Far East.

Important changes were made in the destination and routes of the American foreign trade during the half decade that preceded the establishment of the National Government. Prior to the revolutionary era, there had been a large triangular trade via Spain, Africa, and the

West Indies. The people of the West Indies secured a large share of their slaves and also some of their imports from Spain in American ships. Exports were sent from America to Spain and Africa to be traded for commodities and slaves for sale in the West Indies in exchange for sugar, rum, molasses, and other articles required in the markets of continental America. When the United States became an independent country, this triangular trade tended to decline; the loss, however, was made good by the development of trade with Russia via the Baltic and with countries of the Far East. Although the trade with these two sections was only in its infancy in 1789, it had been well established. The commerce with the Far East subsequently became an important source of wealth to American traders, such as Derby of Salem, Peabody and Cabot of Boston, and Girard of Philadelphia. Important as was the West Indian trade to the United States, the loss of commerce due to the closing of the British West Indies to American ships was offset by the opening up of the commerce with Russia and the Far East. The main outlet for American products and the chief source of imported manufactures was Great Britain. It was the large trade with Great Britain, and, by way of Great Britain, with the other European countries, that enabled American merchants so to develop American commerce that, by 1789, it had reached the proportions it had attained before the Revolution.

CHAPTER VIII.

AMERICAN COMMERCIAL POLICY, 1776 TO 1789.

Commercial policy determined by the States, not by the Confederation, 132. Commercial legislation during the Revolution, 133. Import duties during the Revolution, 134, between 1783 and 1785, 135, from 1785 to 1789, 136. The impost legislation of Massachusetts, 136. The Pennsylvania tariff law of 1785, 137. The impost duties imposed by other States, 138. Discriminating duties in aid of American shipping, 139. Tonnage taxes, 140. Export duties, 140. Production bounties and navigation laws, 141. Commercial legislation of the Confederation, 142. General characteristics of the period, 143.

Within a short time after the declaration of independence the several colonies established State governments, and in 1781 the States united under the Articles of Confederation. The union thus formed was a loose one, each State retaining almost complete sovereignty, and reserving to itself the authority to legislate on finance, commerce, and other questions of common concern to all the States—matters that ought to have been intrusted to the general government.

American commercial policy during the thirteen years preceding the inauguration of President Washington was determined by the States, and is embodied in their laws instead of in the legislation enacted by the Federal Government. In order to secure the revenues indispensable to the maintenance and continuance of the Federal Government the Federal Congress sought in vain to obtain the consent of the States to the national levying of duties on imports; consequently the history of the commercial policy of the federation is a short chapter of unsuccessful efforts to get the power to do what was denied it by the States.

The period from 1776 to 1789 includes two distinct parts—the war-time to 1782 and the years of transition from federation to nationality. The legislation of the States during the war differed greatly from that of the six years intervening between the achievement of independence and the realization of efficient national existence under the Constitution. While the war was in progress commercial intercourse with Great Britain was prohibited both by the States and by Great Britain, and embargoes were laid by the States to prevent the exportation of certain commodities to any country. Trade with countries other than Great Britain was permissible as regards most commodities, but was reduced to small proportions by the vigilance of the powerful British navy. The States did not impose duties on imports from 1776 to 1782, but at the close of the war the levies were laid, at first for revenue only, but later for the two-fold purpose of affording protection to domestic industries and trade, and securing the necessary public funds. The promotion of American shipping was another important aim of the State laws.

COMMERCIAL LEGISLATION DURING THE REVOLUTION.

Before the war started, the non-importation agreements of the colonists had severely checked the trade with Great Britain. The opening of hostilities put an end to all commerce with British countries, except such clandestine trading as was possible, which must have been of small volume. This meant the suspension of nearly all of the over-sea trade of the States, because colonial commerce, as the result of the economic factors by which it was mainly controlled and of the British Acts of Trade by which it was regulated, had been confined chiefly to Great Britain and the British West Indies.

Little headway could be made during the Revolution in developing a trade between America and non-British countries. The danger of capture by the British navy would have prevented most merchants from risking their property on the high seas; but there were other serious obstacles to trade. The prosecution of the war and the cessation of the trade with British countries combined to reduce the purchasing power of the people of America, and the volume of imports must necessarily have been small had there been no liability of their being seized in transit across the sea.

Exports from the States were hampered during the war. The demand for home products was increased, because most of the supplies that had been secured in the mother country were no longer to be had by importation. Indeed, the domestic supply of foods and other necessities became so limited, as the war proceeded, that many colonies placed embargoes upon the exportation of various commodities.

The earlier embargoes were in most instances laid upon foodstuffs, the purpose of raising these bars to trade and those that were raised at a later date being both to protect the home supply and to prevent the enemy or outside rivals from obtaining the commodities. The sentiment in favor of these embargoes was general, Congress having requested their imposition by the States; but the strict enforcement of the laws prohibiting exports was difficult, especially in New England, where such a large portion of the people lived by trade. The usual policy was to permit small quantities of foodstuffs to be exported for particular purposes, the governor or some other designated official being authorized by law to grant temporary licenses to individual exporters. There were doubtless some evasions of the laws.

After 1777, embargoes were placed on various commodities other than foodstuffs, and the prohibitions applied, not only to the export to foreign countries of the articles specified, but also to their sale in neighboring States, each commonwealth being concerned to prevent a scarcity of the foods or materials its population might require. When the war ended, all the embargoes were terminated, and with the exception of occasional and unimportant prohibitions upon the export of particular articles, the States did not again raise the bars against the outflow of American wares.

IMPORT DUTIES.

The policy of the States in regard to duties on imports during the period from 1776 to 1789 passed through three phases:

Import duties were not levied during war. Virginia was the only exception to this, as she was the only State that did not cease to lay and collect the duties.

After hostilities ceased, *i. e.*, between 1781 and 1784, the States, with the exception of New Jersey, placed duties on imports, but for revenue only and not for protection.

By 1785, economic conditions had developed in the United States that caused the New England and most of the Middle States to adopt the principle of moderate protection to domestic industries, and to change their tariff laws accordingly. The Southern States, not having industries that suffered from foreign competition, and being large purchasers of foreign manufactures, did not, with the possible exception of Virginia, change their tariffs so as to make them protective.

(1) While engaged in the war with Great Britain, there was small reason why the States should, and some reasons why the States should not, place duties on imported goods. They could not trade with British countries and they had but little commerce with countries not under the British flag. Nor could they expect, at least during the progress of the war, to develop much trade with any foreign country. The States might well have omitted to levy imposts, merely because it was useless to do so; but it is doubtful whether the States whose formation resulted from the declaration of independence would have been disposed to reestablish, of their own accord, any of the restrictions by which their trade and industry had been restrained by Great Britain. The sentiment of the States at the close of their struggle for independence was for full freedom of trade. The heroic contest in which the States had engaged had been waged to secure economic freedom, and for that reason the doctrines of economic liberty, as expounded by the French economists, and especially by Adam Smith, must have had a strong influence upon the thought of Americans. We know, indeed, that some of the political leaders—Franklin, Jefferson, John Adams, and others—were earnest advocates of Adam Smith's views. The public men of America were, however, not of the doctrinaire type, and when the economic interests of the States seemed to require tariff duties and protection to domestic industries, they did not hesitate to adopt such political measures as the situation demanded.

The only State that maintained import duties throughout the five years of active warfare (1776–1781) was Virginia, which secured a part of her revenues from imposts upon liquors. Virginia was better able than most States to obtain a revenue by taxing commerce, because the exportation of tobacco was not altogether stopped by the war.

and the continuance of an export trade made possible the maintenance of an import traffic in liquors and other commodities. Maryland was without import duties only during 1778 and 1779.

(2) A period of "tariffs for revenue only" began with the restoration of impost duties toward the end of, and shortly after, the Revolution, and lasted until 1785 or 1786, when the majority of the States revised and raised the duties for the purpose not only of securing more revenue, but also to afford protection to domestic industry and trade and to aid American shipping.

There was a pronounced revival in trade, particularly in foreign commerce, at the close of the Revolution. As always happens immediately or soon after a war which has compelled many forms of business to suspend for some years, men were more than usually active and hopeful in trade and industry. All desired to regain lost ground, make up for lost time in production, or by pushing trade and extending credit to dispose of the stock of goods that had accumulated during the war. At such times the consumer who has practiced enforced abstinence for a long time is an eager buyer and is often more optimistic as to the payment of his bills than his financial means justify.

The American States afforded a good market in 1783 and 1784, and one that the British merchants were eager to enter. The market was good, not only for the psychological reason just cited, but also from the fact that there was then a relatively large supply of coin in America. This stock of the precious metals had accumulated in the United States as a result of the shipments of coin made by Great Britain and France to maintain their armies and fleets. As the Americans could buy but little abroad, the gold and silver remained in the country until the close of the war.

The supply of "hard" money meant good prices and ready buyers, and stimulated the flow of British goods into America. Moreover, British producers and merchants had large stocks of goods on hand as the result of the interruption of trade for several years, and overselling readily followed. The purchasing power of Americans was overestimated, and credit was unduly expanded. But little time was required for the real condition of America, economically and politically, to become manifest. The people of the United States were not strong enough industrially and financially to compete successfully with Europe. The successful development of American industries during the years of the war, when all competition with Europe was prevented by the practical cessation of trade, had deluded the people of the United States as to their real and relative economic condition. Two years of free and active trading with Europe during 1783 and 1784 were sufficient to undermine many of the industries that had grown up to supply the markets secured to them by the protection afforded by the war.

In 1785 the panic came. The monetary situation was deplorable, not only because the coin had been exported to pay for imported goods,

but also from the fact that the Confederation had no authority to coin money and to establish a uniform system of currency. Each State still had the power to issue money, and many of them unwisely sought to relieve the situation of 1785 and 1786 by putting out paper money. The industries suffered severely from the falling prices (in coin) and the loss of the markets that were now more than adequately supplied as regards many articles by the importations from Europe, mainly from England. American merchants had become embarrassed and were unable to pay for the goods they had bought on credit. The situation of both producers and traders in the United States was made much worse by the closing of the British West Indies to American shipping.

The industrial depression and the financial crisis combined to reduce the revenues of the States at a time when their fiscal needs were rapidly growing. The war left them with heavy debts and large interest charges, and there was a natural increase in the ordinary expenses of government as the States took up the administrative problems with which they were confronted in the organization and development of their new institutions. Political needs as well as economic troubles led to an increase in the import duties in or about 1785.

(3) The period of State imposts for both revenue and protection covered, in general, the four years 1785 to 1789. The aid afforded by the laws of those States that adopted the principle of a protective tariff was intended to assist industry, trade, and domestic shipping. The colonies south of Virginia adhered to the policy of import duties for revenue only; New Jersey levied practically no imposts; the other States changed their tariffs so as to afford incidental protection.

The general features of the impost legislation adopted in the closing years of the war and the nature of the changes made in those laws in 1785 and 1786 may be briefly illustrated by reference to Massachusetts and Pennsylvania.

When Massachusetts reluctantly returned to the imposition of import duties in 1782, the law provided that it should continue in force only six months after the restoration of peace, because, as the statute stated, "all restrictions upon trade have been found to be highly injurious to those countries which derive a great part of their wealth and strength from commerce." By this law there were but a few articles upon which specific duties were laid—wine, tobacco, tea, sugar, iron, and coaches being the principal ones. Upon six commodities an ad valorem rate of 5 per cent was placed. Upon all other imports the duty was 2.5 per cent. As this law did not seem to injure trade, it was continued in 1783 with a slight lowering of the specific duties. The act of 1784 shows a change in policy. The ad valorem rates on several articles—paper, candles, soap, linseed oil, leather, beef, and pork—were made 7.5 per cent, and the duty on coaches, carriages, harness, saddles,

boots, shoes, and plated ware were fixed at 12.5 per cent. The articles upon which the rates were raised were among the commodities produced at home, and the act of 1784 was intended to afford some measure of protection against Great Britain. The act of the following year gave still more prominence to protection by increasing the specific duties, and by making the ad valorem rate on some articles as high as 25 per cent. The preamble of the act indicated its purpose: "Whereas, it is highly necessary for the welfare and happiness of all States, and more especially such as are republican, to encourage agriculture, the improvement of raw materials and manufactures, a spirit of industry, frugality and economy, and at the same time to discourage luxury and extravagance of every kind: Be it enacted," etc. However, the protection afforded by this measure was not deemed adequate, and in 1786 the State adopted the plan of prohibiting any importation whatever of 58 articles, among which were included certain articles of luxury, for which in the opinion of the legislators it was unwise for the people of Massachusetts to spend good money, and all the important products manufactured in the State. Thus during the four years intervening between 1782 and 1786, Massachusetts reversed her position on the question of protecting home industries. The acts of 1785 and 1786 were clearly the result of the financial and industrial difficulties of those years.

The revenue and tariff law enacted by Pennsylvania in 1785 has received much attention, because it was the model followed by Congress in framing the first federal tariff legislation—the act of July 4, 1789. The act of 1785 was preceded by certain revenue measures. In 1780, low specific duties were placed upon distilled liquors, wines, sugar, molasses, and tea, and an ad valorem tax of 1 per cent on all other imports. Two years later these duties were somewhat increased in order to obtain funds to provide defenses for the Delaware; but, when peace was restored in 1783, the merchants of Philadelphia secured the repeal of the additional duties imposed for construction of forts, because, as they alleged, the imposts were a handicap upon trade. The State, however, was soon obliged to raise the rates to obtain revenue to pay the interest on its debt. In 1784, the duties were increased for revenue purposes; then the following year the industrial as contrasted with the commercial interests brought about the passage of the celebrated act "to encourage and protect the manufactures of this State by laying additional duties on certain manufactures which interfere with them." The industrial situation which brought about the passage of the law is clearly described in the preamble to the act:

"Whereas, although the fabrics and manufactures of Europe, and other foreign parts, imported into this country in times of peace, may be afforded at cheaper rates than they can be made here, yet good policy and a regard to the wellbeing of divers useful and industrious citizens, who are employed in the

making of like goods, in this State, demand of us that moderate duties be laid on certain fabrics and manufactures imported, which do most interfere with, and which (if no relief be given) will undermine and destroy the useful manufactures of the like kind in this country."

Many articles, among them carriages, clocks, scythes, beer and ale, soap and candles, boots and shoes, and cordage, were subjected to specific imposts; an ad valorem rate of 10 per cent was placed upon other manufactures; and special protection was afforded to the manufacturers of refined iron, to ship-builders, and to carpenters. With the exception of minor modifications in 1786 and 1787 this law remained in force until the National Government was established under the Constitution, the most important amendment being made in 1787, when a reduction of 5 per cent from the import duties was allowed on goods imported in vessels built in Pennsylvania and at least two-thirds owned by citizens of the State.

The policy of the other States as regards import duties during the period under discussion need not be considered in detail. The New England States, New York, and Pennsylvania decided in favor of raising their import duties so as to protect domestic production and trade. New Jersey and Delaware did not levy imposts either for revenue or for protection. Of the Southern States, Virginia was the only one that adopted the policy of protection; Maryland, North Carolina, South Carolina, and Georgia adhered to the plan of tariffs for revenue only; they were chiefly interested in a large export trade and in cheap prices for imported goods; their industries were not such as could be aided by tariffs. The policy followed by Virginia was an intermediate one, less protective than that adopted by the Northern States and less strictly non-protective than the legislation enacted by her southern neighbors. The Virginia statute of 1783, while in most respects a revenue measure, included specific duties on salt, hemp, cordage, beer, ale, and snuff. In 1786, the rates on hemp and cordage were raised, and a duty was placed on cheese; and in the revision and codification of the laws the following year the policy of moderate protection was adhered to. Such leaders as Patrick Henry and James Madison, who were theoretically opposed to trade restrictions, favored the legislation of 1786 and 1787 as being necessary for the protection of Virginia's trade and industries.

The import duties levied by each State were imposed on the goods imported from other States as well as from foreign countries. This, of course, placed a handicap upon the development of American commerce. The interstate trade was not specially large at that time, it is true, and the rates of duty were highest upon the products of foreign countries, particularly of Great Britain; nevertheless, the tariff barriers tended to hinder the growth of the trade among the States, as well as to check the progress of commerce with lands beyond the sea.

The most serious result was that the rivalries and jealousies of the States, which had prevented them at the time of the adoption of the Articles of Confederation from conferring upon the Congress the power of regulating commerce, caused each State to view with alarm and to strive to limit the commercial success of every other State. Fortunately for the future of America, the political leaders of that time were large-minded enough to realize the folly and danger of continued interstate dissension and to bring about the establishment of an effective national government under the Constitution.

DISCRIMINATING DUTIES IN AID OF AMERICAN SHIPPING, TONNAGE TAXES, AND EXPORT DUTIES.

The tariff laws of nearly every State aided domestic shipping in two ways: by making the duties less on goods when imported in the ships built and owned by its own citizens, and by making the tonnage taxes less on domestic than on foreign ships. The laws containing these provisions were numerous.

The discriminating duties favoring domestic shipping were adopted not only to aid the American ship-builders and owners to hold their own in competition with foreigners, but also for the special purpose of retaliating against Great Britain for the action she took at the end of the Revolution in closing the ports of the British West Indies against American ships. On the ground that our independence had made us a foreign country, Great Britain decided to apply her Navigation Acts to the United States, just as she did to other nations not under the British flag. No other act of hers did so much as this to injure the trade of the American States, particularly those in New England; indeed, it checked the commercial progress of America for a full decade, or until the beginning of the great war between France and Great Britain, when the United States was permitted to engage in the West Indian trade and was allowed special advantages as the foremost neutral carrier on the high seas.

Another purpose of the discriminating duties imposed by one State, Pennsylvania, was the promotion of direct trading and the increase of commerce with the Far East. The effect of placing higher duties on goods when not imported directly from the place of growth or manufacture was felt chiefly by British merchants, because they were the chief competitors of American traders. This feature of the Pennsylvania act of 1785 was incorporated in the first national tariff law, and did much to build up the commerce of America with India and China.

The general character of the discriminations in duties to favor American ships is indicated by the fact that New Hampshire and New York imposed double duties on goods brought in foreign ships; that Rhode Island made the duty 7.5 per cent on goods imported in British bottoms and 2.5 per cent in other ships and followed this law by one

(1786) providing that no goods from the United States should be brought into Rhode Island in British ships; that Pennsylvania favored direct trade with the Far East, as stated above, and that Maryland made the duty 2 per cent higher on goods brought to her ports by British vessels. Virginia and North Carolina discriminated against the imports from those nations not having a commercial treaty with the United States. From this brief statement it will be seen that most, though not all, of the States adopted the policy of discriminating duties and that the policy, as would naturally be the case, was given more prominence in the Northern than among the Southern States.

Tonnage taxes require only brief discussion. They were imposed by most of the States, laws providing for levying them being enacted by Virginia and North Carolina before the close of the Revolution, and by other States shortly thereafter. These taxes were placed upon shipping for the twofold purpose of securing the funds required for such harbor expenses as the maintenance of lights and buoys, and of aiding domestic shipping by discriminations against foreign vessels. To some extent the coastwise trade was favored, most States exempting or placing low tonnage taxes upon their shipping when engaged in coastwise commerce. As illustrations of the discriminations made in the tonnage taxes, mention may be made of New Hampshire's law of 1784, which imposed treble duties on foreign ships, and of the Pennsylvania legislation of 1784, which retaliated against Great Britain for closing the West Indies by imposing a duty of 7s. 6d. per ton upon the vessels of the countries not having a commercial treaty with the United States. The States in their tonnage laws followed the same general policy as in their legislation concerning imposts, except that the tonnage taxes were more strongly protective of domestic shipping than the impost duties were of home trade and industry.

As it was the policy of all the colonies to promote rather than to hinder maritime commerce, most of them had, by the middle of the eighteenth century, ceased to levy export duties. The only colonies that maintained these taxes as a regular part of their revenue system were Maryland and Virginia, whose exports, especially tobacco, could be taxed without much danger of limiting the volume of trade. Shortly before the Revolution (1773) Georgia placed an export duty of minor importance on raw hides. These three States, Georgia, Virginia, and Maryland, were the only ones that imposed duties on exports after the Revolution. Georgia continued the tax on raw hides; Virginia placed the duty only on tobacco; while Maryland levied export duties, not continuously, but most of the time, upon tobacco, pig-iron, wheat, and flour.

While the chief reason for levying a tax on exports was to secure revenue, fiscal aims were not the only ones sought. Maryland made reductions in the duties on goods exported in vessels owned and oper-

ated by her own inhabitants; and Virginia, in order to carry out the provisions of the treaty of 1778 between the United States and France, exempted from duties the tobacco exported to the French West Indies.

Congress is now prohibited by the Constitution from taxing exports. The States decided against giving the National Government the power to tax both exports and imports. The reason for this decision, however, was not so much a theoretical opposition to export duties as it was the fear on the part of the States having a large export trade that the Congress might tax their commerce relatively more than it did the trade of the other States. The five Southern States, with the support of Massachusetts and Connecticut, secured the adoption by the constitutional convention of the provision against taxes on exports.

PRODUCTION BOUNTIES AND NAVIGATION LAWS.

Burdened, as they were, with heavy war debts, crippled by the absence of a unified and sound monetary system, and handicapped soon after the war by the serious business depression of 1785, the States would not have been financially able, had they been disposed, to grant bounties to much extent in aid of production and trade during the years that intervened between the close of the Revolution and the establishment of the National Government. Bounties had been a rather prominent feature of the industrial and commercial policy of the colonies; and there were several States that gave bounties after the war. Connecticut gave a small bounty of a penny a pound on yarn spun at Hartford and aided the foreign trade by exempting from tonnage taxes all vessels employed for at least four months each year in commerce with Europe, Africa, or Asia; New Hampshire granted premiums and exemptions from taxation to induce men to make linseed oil, duck and sail cloth, and to erect slitting mills and nail and sailcloth factories; Rhode Island paid bounties to growers of wool and hemp "to encourage the growth of all raw materials, more especially those that supply clothing to the inhabitants, and duck or cordage for carrying on commerce;" New York gave liberal bounties on hemp; New Jersey gave similar assistance to wool, flax, and hemp; Maryland encouraged salt production; and Georgia assisted the producers of hemp, flax, and wheat.

With but three exceptions, these post-revolution bounties were granted in or after 1785, more aid being given by the laws passed in 1788 than in those previously enacted. It is evident that the bounties were one of the means adopted in some States to aid industry and trade to recover from the effects of the business depression of 1785 and 1786.

The laws regarding pilotage, inspection of exports, port and customs administration, and legislation concerning seamen do not require special analysis. New Jersey was the only colony and State that enacted no

pilotage laws prior to 1789. The other States continued to regulate pilotage much as they had before the Revolution, making such amendments and additions to their laws as were required by the increase in trade and the growth in the size of the vessels. The majority of the States continued after the Revolution to enact laws for the inspection of their staple exports; but five of the States, New Jersey, Delaware, North Carolina, South Carolina, and Georgia, did not deem any new legislation necessary on this subject. Laws of various kinds for the benefit of seamen were passed by all but four of the States. New Hampshire and Rhode Island did not pass laws on this subject after the war, while New Jersey and North Carolina legislated neither as colonies nor as States. The laws for the administration of the customs and the regulation of the ports were necessarily detailed in all of the States, as they had been in the colonies. The theory and practice regarding the inspection of ships and the regulation of imports and exports did not change when the colonies became States.

COMMERCIAL LEGISLATION OF THE CONFEDERATION.

The Congress under the Articles of Confederation having been granted no power to regulate or tax interstate and international commerce, it could only pass resolutions requesting the States to authorize the Congress to enact specified laws. Two unsuccessful attempts were made to obtain the consent of the States to an act of Congress imposing duties on imports. A request for power to regulate foreign trade was also denied. The jealousies of the States defeated each effort.

The first request made by Congress was on February 3, 1781, when permission was asked for power to levy a duty of 5 per cent on imports and on prizes condemned in any port. The receipts from the tax were to be applied to the payment of the principal and interest of the national debt. As Congress could not act unless all of the States gave their authorization, the refusal of Rhode Island prevented action. The second attempt of Congress to obtain authority to levy imposts was made in 1783. A few commodities were to pay specific duties, the other articles 5 per cent ad valorem; the funds secured were to be used for paying the public debt. During the next three years, twelve of the States gave their consent, some with conditions attached; but the movement was finally defeated in 1786 by the refusal of New York even to consider the measure.

After the British Government, in 1783, restricted the trade of the British West Indies to British vessels, Congress sought, by resolution of April 30, 1784, to obtain permission of the States to prohibit, for fifteen years, the importation or exportation of goods at American ports, except in vessels owned by the people of the United States or by the subjects of foreign powers having treaties of commerce with the United

States. The people of foreign nations were, also, to be prohibited f
importing into the United States any goods not grown or manufact
in their own country, unless authority to do this had been grante
treaty. Although the consent of nine States would have given Con
the power to pass this law, the authority was not obtained, and C
gress was not permitted to attempt the regulation of commerce
legislative enactments.

The Articles of Confederation gave Congress the treaty-ma
power, and conventions were entered into with France, Holl
Sweden, and Prussia covering the commercial relations of the Ur
States with those powers; but these treaties were of only slight be
to our foreign trade, because the power to levy import and ex
duties and generally to regulate commerce remained with the sev
States. The Congress had no means of giving effect to the trea
It was this fact, in part—there were other reasons also—that ca
Great Britain to refuse to sign a commercial treaty with the Un
States. The foreign trade of the American States was chiefly
Great Britain and the British West Indies, and commerce suff
severely, because the government of the Confederation was unabl
secure by treaty any exemption from the strict application of
British Navigation Acts to American trade with regions under
British flag. It is, however, not probable that Great Britain w
have made a treaty shortly after the Revolution granting comme
concessions satisfactory to the United States, even had the latter cou
been governed by a strong national government in full control of in
national commerce. As late as 1794, Jay had great difficulty in n
tiating a convention, although the treaty contained so few concess
to the United States that all Americans regarded it as a humiliating

GENERAL CHARACTERISTICS OF THE PERIOD.

Viewed as a whole, the thirteen years from 1776 to 1789 wer
important period not only in the growth of our political institut
but also in the evolution of commercial theories. The trade embar
which characterized the war period were of no special significanc
regards commercial policy, because it is customary for warring nat
to prohibit commerce with each other and to prey upon each otl
ocean trade and shipping; but the change in the opinions of the pu
men during the decade preceding 1789, regarding the principles
ought to prevail in the governmental regulation of commerce, afford
instructive illustration of the control of theory by economic condit
The change also indicates the practical statesmanship of Amer
political leaders.

During the Revolution and for a short time thereafter the preva
thought of Americans was in favor of commercial freedom. Pa
Henry probably expressed the views of the majority of his compat

when, in the closing year of the war, he stated, in his characteristic style, while addressing the Virginia Assembly:

"Why should we fetter commerce? Fetter not commerce, sir; let her be free as the air—she will range the whole creation, and return on the wings of the four winds of heaven to bless the land with plenty."

There were, however, two strong reasons why the States found it impracticable and undesirable to let commerce be free as the air: Revenue must be had for the maintenance of the State government, for paying the interest on the State debt, and for meeting the requisitions of Congress. The easiest and surest way to obtain the necessary public funds was to place duties on imports; and such taxes were imposed by nearly all of the States during the early eighties. A second and longer step away from freedom of trade was taken by the majority of the States in 1785 and 1786 to protect their industries and trade against the overwhelming competition of Great Britain. The severe business depression of 1785 was so clearly due in large part to overtrading with Great Britain that the demand for protection was made by the New England and Middle States, the sections in which domestic industries had made most progress. The disposition of the American commonwealths to protect themselves against Great Britain was strengthened by the closing of the ports of the British West Indies to American shipping, an act that seriously crippled the trade and shipping of the Northern States.

The protection afforded by the States included both industry and trade, and was secured by import duties, bounties, and discriminating tonnage taxes. In adopting this policy America was but following the practice of Great Britain and other countries of Europe. Although it was England's application of the mercantile theory to the administration of her colonies and to the regulation of their economic development that caused the colonies to revolt, yet when they achieved their independence and undertook, as a separate country, to compete with Great Britain, they found it necessary to adopt a system of commercial and industrial regulation differing little from that followed by European countries. Political liberty brought America neither economic independence of Europe nor the ability to practice the principles of commercial freedom in advance of their adoption by the leading old-world countries.

CHAPTER IX.

THE AMERICAN FISHERIES BEFORE 1789.[1]

Dominant position of New England in American fisheries prior to 1789, 145. American fisheries in the sixteenth century, 146. Development of New England fisheries during the seventeenth century, 148. Establishment of the whaling industry, 152. Struggles with France over the fisheries, 153. Extent of the New England fisheries in 1731, 154. The fisheries from the Peace of Paris to the Revolution, 156. Effect of the Revolution upon the fisheries, 158. Provisions as to fisheries in the Treaty of 1783, 159. Revival of cod fishery from 1786 to 1790, 160. Depressed condition of the whale fishery, 161.

Previous to 1789, and, in fact, until near the middle of the nineteenth century, New England held a virtual monopoly of the American fisheries possessing any great degree of commercial importance. A history of the early development of the American fisheries is, therefore, little more than an account of the rise and growth of the fishing industries of New England, and it is to that subject that this chapter will be chiefly devoted, the early history of the fisheries in other parts of the United States being left for consideration in subsequent chapters.

That the predominance of the New England fisheries for two and a half centuries was due to other conditions than the lack of fishing resources elsewhere in America is apparent from the fact that in recent times the fisheries of the Middle Atlantic States have yielded an annual product greater in value than the products of the New England fishing industries. The explanation of the commanding position of New England during the early centuries lies in a consideration of the physical character of the land along the Atlantic coast and the economic laws governing the industrial development of a nation. The material development of a new country is invariably characterized by the early exploitation of those resources and the rise of those industries yielding the largest returns in proportion to the productive effort expended. This principle was admirably illustrated in the economic development of the American colonies. In the region south of the Hudson River, where the fertile coastal plain and the piedmont afforded an abundance of arable soil, agriculture was easily the most profitable industry. The material prosperity of that section was based primarily upon the cereals of the middle colonies, and the tobacco, rice, and indigo of the southern colonies, together with the various forest products of lumber, ashes, and naval stores; and though offshore and inshore fisheries of great value existed all along the coast, they remained practically undeveloped, as long as a large supply of cheap agricultural land was readily available. In New England, though agriculture was the most important single industry, it did not absorb the energies of the inhabitants to the extent that it did those of the people living farther south. The early

[1] This chapter was written by T. W. Van Metre.

settlers of New England found that the sea offered in many respects a more fruitful field for their labors than did the land. The somewhat barren soil yielded a return relatively meager in comparison to the rich harvests that could be gathered from the shallow ocean waters along the shore, and so the fisheries soon came to constitute one of the most important factors of the economic life of New England, and the fishing industries formed the "cornerstone" upon which the commercial prosperity of New England rested throughout the colonial period. Shipbuilding, navigation, and commerce proceeded directly from the development of the fisheries, giving to New England a greater diversification of industry than was to be found anywhere else among the American colonies.

The New England people found, extending along the coast of America, from Long Island to the Grand Bank of Newfoundland, one of the richest fishing-grounds in the world. The submerged coastal plain or continental shelf provides a large area of shallow water, which, cooled by the ocean current from the Arctic seas, makes a home for cod, mackerel, herring, halibut, and many other varieties of fish; and the deeply indented shore-line of the islands and of the mainland furnishes scores of excellent harbors where vessels may seek shelter from the storms at sea and where fishermen may cure their catch before taking it to market. In addition to being populated by a multitude of fish, the cool waters along the New England coast were frequented by whales, and before the close of the seventeenth century the whaling industry also began to be an important factor in the economic life of the New England colonists.

AMERICAN FISHERIES IN THE SIXTEENTH CENTURY.

Long before the first permanent settlement was founded in New England the fisheries of America were well established. In fact, the fisheries were among the very first of the natural resources of America to be systematically exploited by the wealth-seeking nations of Europe. The existence of the Newfoundland fisheries was probably first made known to the people of Europe by John Cabot, the Venetian navigator, who, sailing under a patent granted by Henry VII, in 1497, discovered the mainland of North America. Among the nations of the Old World where the prevailing religious belief caused the consumption of large quantities of fish, the report of the discovery of a new and rich fishing-ground was gladly received, and within a few years after Cabot's announcement the fishing-vessels of several countries began to carry home cargoes from the shores of Newfoundland. The French were first upon the ground. There are authentic records that fishing-vessels of Brittany visited Newfoundland in 1504,[1] and since then not a single year has passed in which the French flag has not been carried to the

[1] Winsor, *Narrative and Critical History of America*, IV, 4.

Newfoundland bank. By 1522, forty or fifty houses had been er
at Newfoundland by French fishermen for use during the fi
season, and at least one attempt had been made before that ye
plant a permanent settlement on the island.[1] The interest stimu
by the growth of the French fishing industry led to the expeditio
Cartier in 1534 and 1535, when he explored the Gulf of St. Law
and voyaged up the river as far as the present site of Montreal.

Though England sent out the explorer who discovered the A
can fisheries, she took but a minor part in their early developr
Anthonie Parkhurst, writing to Richard Hakluyt in 1578, stated
the Newfoundland fishing-fleet was made up of about 350 vesse
which 150 were from France, 100 from Spain, 50 from Portugal ar
from England.[2] For more than three-quarters of a century afte
voyage of Cabot, while both Spain and France were being enriche
the wealth of the New World, England, though by right of disc
possessing a claim to large portions of North America, was too b
occupied with domestic difficulties to send out a single expediti
lay hold of and occupy the regions of the New World to which sh
of right entitled. But during the latter half of the sixteenth cer
the interest of England in America revived. Dispossessed of th
vestige of their territorial holdings on the European continent
estranged from their Catholic neighbors across the channel, the B
people began to direct their energies toward rearing a colonial er
which would give them the economic self-sufficiency needed to
the conditions imposed upon them by their physical, political,
religious isolation.

A fundamental feature of the English political policy of the sixte
century was the creation and maintenance of a strong navy, w
would render the country safe from devastation by the fleets
armies of their continental enemies. To provide a "nursery
seamen" the government turned to the fisheries. Popular liter
and public documents of the period show that there was a widesp
movement for building up the English fisheries, which were at
time inferior to those of Holland, France, and Spain; encourage
in many forms was offered to those who would engage in the fi
industry; and the laws forbidding the eating of meat on Fri
Saturdays, and during Lent were rigorously enforced.[3]

In 1578, Elizabeth gave a charter to Sir Humphrey Gilbert, au
izing him to discover and settle remote lands of America not poss
by a Christian monarch and "to have, hold, occupy and enjoy
lands with all commodities both by sea and by land." Gilbert r
a voyage to Newfoundland in 1583 and in the name of the En
government took possession of the islands and all surrounding l

---

[1] Sabine, *Report on the Principal Fisheries of the American Seas*, 36.
[2] Hakluyt, *Principal Navigations*, VIII, 10.
[3] *Calendar of State Papers, Domestic, 1595–97*, p. 540. For examples of such docume
English Garner (Arber, ed.), III, 621; IV, 323.

within the distance of 200 leagues. Though Gilbert's voyage ended tragically for himself, it helped to stimulate the interest in the fishing industry, and it was followed by a rapid increase in the number of fishing-vessels sent out to Newfoundland from England, which country now claimed the right to monopolize all the fisheries within the district of which Gilbert had taken formal possession. By the close of the sixteenth century, 200 English ships were going each year to Newfoundland, furnishing employment for 10,000 men and boys on shore and aboard the vessels.[1] Sir Walter Raleigh stated before Parliament in 1593 that the Newfoundland fisheries were the "stay and support of the west counties of England."

Though the English claimed a monopoly of the Newfoundland fisheries and on several occasions emphasized their claim by the seizure and confiscation of fishing-vessels belonging to other nations, the French persisted in retaining a share of the profitable industry. The French established a permanent settlement at Port Royal (Annapolis) in 1604. Nine years later they attempted to plant another settlement on Mount Desert Island, but the colonists had scarcely disembarked before they were set upon and dispersed by an English force under Samuel Argall, the Governor of Virginia, who had come northward on a fishing voyage. This conflict marked the beginning of the century and a half of struggle between England and France for the control of the North American continent.

DEVELOPMENT OF NEW ENGLAND FISHERIES DURING THE SEVENTEENTH CENTURY.

In 1602, Bartholomew Gosnold commenced the fisheries off the shore of New England. Gosnold gave Cape Cod its name because of the large quantity of fish he captured in its vicinity, and when he returned to England he reported that the fishing-grounds along the coast he had visited were better even than those of Newfoundland. In 1603, Martin Pring, who with two small vessels was sent to the New England coast by some Bristol merchants, made a similar favorable report about the fisheries in that region. Three years later Pring made a voyage to the Maine coast for the Plymouth partners of the first Virginia Company. His favorable report concerning this voyage led to an attempt in 1607 to plant a colony on the Kennebec River, or the Sagadahoc River as it was then called, but the death of the leading promoters of the scheme caused the settlement to be abandoned before it had been in existence a year.

Though the initial attempt at the colonization of the New England coast failed, the rich fishery which the early explorers discovered was not neglected. Each year a number of English ships came to the new fishery grounds. In 1614, Captain John Smith visited the coast,

[1] Whitbourne, *Observations*, in Smith, *Works* (Arber, ed.), 777.

explored many of the bays and harbors, and gave both New England and Plymouth harbor their names. In Smith's account of his voyage, published in 1616, he states that near Monhegan Island he took 47,000 fish, which he sold for a goodly sum on his return to Europe.[1] In his *General History of Virginia*, written in 1624, Smith states "There hath been a fishing, this year upon the coast [of New England], about fifty English ships."[2] Between 1620 and 1630, a number of settlements were established in New England, virtually all of which, with the exception of the one at Plymouth, were planted primarily for the purpose of prosecuting the fishing industry. The Plymouth colony, during the early years of its existence, depended largely upon the fisheries for food, and the Pilgrims attempted to engage in the fishing industry as a business venture, but because of a lack of skill and equipment their early efforts ended in failure and loss.

The early years of the first fishing-stations in New England were marked by a bitter dispute between the Colonial and English fishermen on the one side and the Council for New England on the other over the fishing rights along the New England coast. The members of the Council to which James I granted, in 1620, that part of America lying between the fortieth and forty-eighth degrees of north latitude, claimed a monopoly of the fisheries in the waters adjacent to their grant and tried to exclude from them all persons, whether British or alien, who did not secure a license from the Council and pay a sum equal to about 83 cents a ton on all vessels engaged in fishing within the Council's territory. In 1623, the Council sent an agent to America with power to restrain vessels from fishing without a license, but the stubborn resistance offered by the fishermen against what they considered an invasion of their natural rights made the task of exacting tribute too great to be accomplished, and the agent was compelled to return and announce the total failure of his mission.[3] The Council did not again renew their efforts to secure a revenue from fishing licenses and turned their attention to selling grants of land from their American possessions. A few of the earlier patents which they sold conveyed exclusive fishing-rights, but the practice of granting such monopolies was discontinued in 1631, and with the exception of a few quarrels among the earlier patentees concerning their respective rights, the American fisheries were never again disturbed by the question of private monopolization.

The members of the Massachusetts Bay Company, who came to America in 1630, though not realizing the commercial importance which the fisheries were ultimately to have for them, were careful to send over fishermen, salt, and fishing equipment even before their own

---

[1]Smith, "A Description of New England," in *Works* (Arber, ed.), 187.
[2]Smith, *Works* (Arber, ed.), 783.
[3]Sabine, *Report on the Principal Fisheries of the American Seas*, 43.

emigration. Moreover, within a year after the settlement of Boston, Governor Winthrop launched at Mystic the *Blessing of the Bay*, a vessel of 30 tons, for use in trading with the Dutch at New Amsterdam and with the other English plantations. Other vessels, both large and small, were built at the various settlements planted by the Massachusetts Bay Company, and a thriving commerce quickly arose. Though fishing was for a few years carried on only in an incidental and desultory manner, the products of the industry from the very first constituted a part of the exports from the colony. In 1633, fish were exported from Boston, and in 1634 a Maryland pinnace came to Boston to exchange a cargo of corn for fish and fur.[1]

By 1636, the people of Massachusetts began fully to realize that in the fisheries lay their chief opportunity for commercial advancement, and preparations were made to engage in the fishing industry on a larger scale. Hugh Peter, a minister of Salem, inaugurated a movement to raise capital for the purpose of establishing the fishing business on a more substantial basis. He labored with untiring zeal to induce the people of Salem to build ships and engage in trade, and to his efforts was due in no small degree the maritime importance which the city of Salem came to enjoy.[2] At the same time that Salem responded to the exhortations of the Reverend Peter, Boston, Marblehead, Gloucester, Manchester, and other ports along the Massachusetts shore also expanded their fishing industries. In 1639, for the encouragement of the infant industry, the General Court passed an act providing that all vessels and other property employed in taking, curing, and transporting fish should be exempt from all duties and public taxes for seven years, and that all fishermen, during the season of their business, as well as ship-builders, should be excused from military duty.[3] Under this and other encouraging acts of the General Court the Massachusetts fisheries prospered greatly. Governor Winthrop records that in 1641 about 300,000 dried fish were sent to market,[4] and his narrative gives further indication of the growing importance of the fish trade in the account of the return, in 1643, of the *Trial*, the first vessel built in Boston, from a voyage to Bilbao and Malaga with a cargo of wine, fruit, oil, and wool that had been purchased with the proceeds of the sale of a cargo of fish.[5] Before the middle of the century New England merchants began to send cargoes of fish to the West Indies to be traded for molasses, rum, and bills of exchange.

The most important fish of commerce was the cod, and this variety constituted by far the largest portion of the annual catch. But mackerel, hake, pollock, herring, and other fish were also caught in considerable quantities both for local consumption and for exportation. It is worthy of notice that in 1670 the Plymouth Company, whose

[1] Winthrop, *Journal* (Hosmer, ed.), I, 131. [2] *Ibid.*, 168.
[3] Shurtleff (ed.), *Records of Massachusetts Bay*, I, 257.
[4] Winthrop, *Journal* (Hosmer, ed.), II, 42. [5] *Ibid.*, II, 92.

fisheries were usually leased to individuals for a fixed annual sum, granted the profits of the mackerel, sea bass, and herring fisheries for use towards the maintenance of a free public school.[1]

Throughout New England the codfish were divided into three sorts: The first of these, the merchantable, were exported to southern Europe; the second or middling (of smaller size and poorer quality) were shipped to the Canaries, the Madeiras, and Jamaica; the third (or refuse), which consisted of the smallest and thinnest and the broken fish, were sold to the sugar planters of the West Indies to be used as food for negro slaves.[2] As early as 1652 the General Court provided for the inspection of fish. Other measures were enacted to fix the season for taking different kinds of fish, to regulate the packing and curing of fish intended for shipment to foreign markets, and to protect the people living along the coast from the depredations of fishermen who were inclined often to take timber and wood without compensating the owners.

In 1645 some merchants of Charlestown and Boston sent several vessels to the Newfoundland fisheries, but as the vessels were preparing to return with their cargoes they were seized by a ship cruising in Newfoundland waters in the interest of Charles I, who was at that time battling for his crown and was not favorably disposed toward his New England subjects, because of their sympathy with his Puritan opponents. For a number of years after this occurrence few vessels went from New England to the Newfoundland Banks, but about 1670 the need for a larger field for the rapidly growing fishing fleet of Massachusetts caused a renewal of the interest in the fisheries farther north, and from that time forward the fishing-grounds off Newfoundland were regularly visited by the New England fishermen.[3]

The enactment of the Navigation and Trade Acts of 1660 and 1663 gave an impetus to the ship-building and fishing industries of New England. The omission of New England's most important products from the list of enumerated commodities left the export trade free, and the monopolization of the carrying trade of the colonies by vessels of the empire increased the opportunities for the employment of colonial shipping. The fact that England excluded the chief exported products of New England was of benefit to the latter's shipping. Shipping interests of England did not care to make a practice of carrying cargoes to places

---

[1] *Plymouth Colonial Records*, V, 108.

[2] *Documents Relating to Colonial Hist. of N. Y.*, IV, 790.

[3] Seybert, in his *Statistical Annals*, p. 333, stated that in 1675 New England sent to the Newfoundland fishing-grounds 665 vessels measuring 25,650 tons and navigated by 4,405 seamen. This statement, which has been quoted as showing a remarkable growth of the interest of New England in the Newfoundland fisheries, manifestly contains a typographical error. The date intended was 1765. Moreover, the figures, which Seybert probably took from Jefferson's report on the fisheries (*Am. State Papers, Commerce and Navigation*, I, 8), were for the entire cod fishery of New England during the ten years following 1765, and not for the Newfoundland cod fishery alone. The fishing fleet of Massachusetts in 1741 did not contain above 400 sail, and in 1675 the number was probably less than 150.

where no return cargo was available, and consequently a large part of the carrying trade between England and the northern colonies was relinquished to the New England vessels. The growth of the shipping of New England was so great that it soon rivaled that of the mother country. English shipping interests made earnest pleas to Parliament to restrict this branch of colonial industry, but fortunately this was not done.

The act of trade compelling the colonies to purchase wares of European manufacture in England worked little hardship on the trade of New England. With the exception of wines and salt, the countries of southern Europe, where a large part of New England's exports were sent, produced but little that New England needed, and the law permitted wines to be imported directly from the Azores and Madeira, while with regard to the importation of salt there were no restrictions whatever. For the purchase of the manufactured goods needed in the colonies, England supplied the leading articles and also afforded the most economical market for their acquisition. It was not until the passage of the Molasses Act in 1733 that the commerce of New England felt the heavy weight of burdensome regulation; but as this law was ignored, commercial prosperity was practically unimpeded by English legislation until the beginnings of the controversies that led directly to the struggle for independence.

The whaling industry was established in the American colonies at an early date. When Captain John Smith visited the New England coast in 1614 he came with the intention "to take Whales and make tryalls at a Myne of Gold and Copper,"[1] but he abandoned both these projects and engaged in fishing for cod off Monhegan Island instead. Richard Mather, who came to Massachusetts in 1635, told of seeing, off the New England coast, "mighty whales spewing up water in the air like the smoke of a chimney . . . . of such incredible bigness that I will never wonder that the body of Jonas could be in the belly of a whale."[2] The whaling industry started with the utilization of occasional drift whales cast ashore by the sea, but it soon passed to the second stage of pursuing in small boats the whales which appeared along the coast, killing and towing them to shore, where they were cut up and the oil and bone extracted. At Plymouth, Salem, Nantucket, at the villages on the eastern end of Long Island, and in fact at all of the localities where whaling subsequently became an important industry, with the exception of New Bedford and New London, the whale fishery was established as a regular business before the close of the seventeenth century, and whale products constituted a considerable part of the exports regularly shipped by New England merchants.

[1] Smith, "A Description of New England," in *Works* (Arber, ed.), 187.
[2] Young, *Chronicles of the First Planters of Mass. Bay*, 465.

STRUGGLES WITH FRANCE OVER THE FISHERIES.

Early in the development of the fishing industries of New England the fishermen became involved in difficulties with their French neighbors to the northward. The rival claims of France and England to Acadia and the efforts of English and French patentees to monopolize the fisheries of that region, caused much strife and bloodshed between the French and English fishermen during the early years of the seventeenth century. By the treaty of St. Germain, Charles I relinquished to the French crown all places in Canada, Acadia, and Cape Breton occupied by English subjects,[1] but since the treaty was very unpopular in England, and since it defined no territorial lines, contentions quickly arose again. Cromwell, repudiating the treaty made by Charles I as fraudulent, took forcible possession of Acadia in 1654, established a colony, and organized a government, but after the Restoration these acts were disavowed, Acadia was again relinquished to France by the Treaty of Breda (1667),[2] and the Treaty of London in 1686 confirmed to both France and England the possessions in America held at the beginning of the hostilities of which the treaty marked the end.[3] These two treaties also failed, however, to define the territorial limits of the American possessions of the rival powers, and the fishing-grounds, which both sought to monopolize for their own subjects, continued to be the scene of collisions and quarrels. As the New England fishing industry expanded, the relations of the English colonies with the French became exceedingly hostile, and the leading citizens of New England began to clamor for the expulsion of French fishing interests from American waters. The French, on the other hand, were equally anxious to maintain the exclusive possession of the fisheries of Nova Scotia and Cape Breton. They laid claim to all the territory east of the Kennebec River, levied tribute on all foreign vessels engaged in fishing on the Acadian coast, and to discourage the visits of New England fishermen to that region they incited the Indians to attack the outlying English settlements and to murder the crews of boats frequenting the coast of Maine.

The war between England and France which followed the accession of William and Mary gave the New Englanders the eagerly desired opportunity to undertake the conquest of Nova Scotia. Sir William Phips, a native of Maine, led a successful expedition against the French colony in 1690. At the Peace of Ryswick, in 1697, it was stipulated that all territory conquered during the war should be restored, and the New England people, much to their dissatisfaction and indignation, were compelled to see France confirmed in the possession of all the coast islands and fishing-grounds from the Penobscot River to beyond Labrador, except the eastern half of Newfoundland, which

---

[1] *Corps Universal Diplomatique*, VI, pt. i, 31. [2] *Ibid.*, VII, pt. i, 40. [3] *Ibid.*, VII, pt. ii, 140

was retained by England.[1] The governor of Nova Scotia received orders from King Louis to seize every American fisherman that ventured east of the Kennebec River, leaving free to American vessels only those fisheries of the eastern half of Newfoundland and those lying between the Kennebec River and Cape Cod.

In 1702 the war between France and England broke out again, and the contest for the mastery of the American fisheries was once more renewed. In 1710 Nova Scotia was again taken by combined colonial and English forces, and this time it was not given back. Peace was concluded in 1713. By the terms of the treaty, signed at Utrecht, the French were prohibited from fishing within 30 leagues of the coast of Nova Scotia from Sable Island to the southwest; and the whole of Newfoundland, together with Hudson Bay and its borders, was formally ceded to England.[2] France retained possession of Cape Breton Island, the Gulf of St. Lawrence, and the islands lying within its mouth, while at Newfoundland, French fishermen were to have the privilege of catching fish and drying them on the land on the eastern coast from Cape Bonavista to the northern part of the island and thence down the western coast as far as Point Riche. It was thought by the English interests that this would give them exclusive possession of the richest of the fisheries, including those off the coasts of Maine and Nova Scotia and in the Bay of Fundy, together with an equal chance to compete with the French in all the other fisheries. The French, however, immediately colonized Cape Breton Island and erected a strong fortress at Louisbourg. Within a short period of time their fisheries, which had declined during Queen Anne's War, were more flourishing and prosperous than ever before, much to the jealousy and dissatisfaction of all New England.

The years between the Peace of Ryswick and the Treaty of Utrecht were a period of depression for the New England fisheries, but upon the conclusion of peace in 1713 there was a general revival. The settlements on the coast of Maine were reestablished and new stations planted farther east, the ship-building industry commenced once more to thrive and expand, and the volume and range of foreign trade were increased. The renewed activity in the fisheries was soon checked by the recurrence of Indian depredations on the Maine coast and by the aggressive competition of the French. In 1725, however, a treaty was made with the Indians, and once more a period of prosperity ensued, which lasted for a score of years.

In 1731 New England employed between 5,000 and 6,000 men in the fisheries, and the annual product was estimated at 230,000 quintals of dried fish.[3] It was about this time that Marblehead took the lead as a fishing-port. Gloucester, Plymouth, Salem, and other towns of Massachusetts added each year to their fishing fleets, and the fishing

[1] Chalmers, *Treaties*, I, 332. [2] *Ibid.*, 381. [3] Anderson, *Origin of Commerce*, III, 172.

industries of New Hampshire, Maine, and the Isles of Shoals grew very rapidly. The cod fishery retained the place of chief importance, but sturgeon, mackerel, herring, salmon, and other varieties of fish constituted a considerable part of the total yearly catch. The whale fishery advanced from the stage of boat whaling to deep-sea whaling. By 1715 Nantucket had 6 sloops engaged in the deep-sea whaling and by 1730 the number had increased to 25. In 1736, a dozen vessels, some of which were of 100 tons burden, went from Provincetown to the whale fishery of Davis Straits, and at other New England whaling ports there was a similar steady expansion.[1]

In 1744, England again became involved in war with France. Filled with envy and alarm on account of the continued prosperity that had attended the French fisheries after the Treaty of Utrecht, the people of New England hailed with satisfaction the coming of the opportunity to make another attempt to expel their rivals from the field. Cape Breton Island, with its strong fortress at Louisbourg, was the key to the French position and it was the seizure of this point that the colonial government of New England decided to undertake. Accordingly, in March 1745, an expedition under the command of William Pepperell was sent against the French stronghold. In the colonies south of New England the authorities declared Louisbourg to be impregnable and refused to lend any assistance to the expedition, which they asserted could end only in ridiculous failure. But notwithstanding the strength of the French position and the opinions of their neighbors, Pepperell's men, with the aid of an English fleet, accomplished the capture of Louisbourg in less than two months, an exploit that was one of the most remarkable events of colonial history. However, the effect of this brilliant feat on the outcome of the struggle for the control of the fisheries was entirely negligible, for in the Treaty of Aix-la-Chapelle, by which the war was terminated, in 1748, England returned Louisbourg and Cape Breton Island to France, thus restoring conditions in America to practically the same state that had existed before the war.[2]

In 1756, the conflict was once more renewed. Again the English and colonial forces demonstrated their superiority over the French, and this time the fruits of victory were not given back. By the terms of the treaty concluded in Paris in 1763, France was dispossessed of her continental possessions in North America and lost all her territory in the northern fishing-grounds except the two small islands of Miquelon and St. Pierre, which she was allowed to retain for the use of French fishermen.[3] The treaty provided that the fisheries of Newfoundland and Nova Scotia should remain on the footing established by the treaty of 1713, but France was excluded from the fisheries lying within 15 leagues of Cape Breton Island and from the fisheries in the Gulf of St. Lawrence lying within 3 leagues of the coast of any land belonging to Great

[1] Tower, *History of Amer. Whale Fishery*, 27. [2] Chalmers, *Treaties*, I, 424. [3] *Ibid.*, 467.

tain. Thus did England acquire an empire from her ancient rival, the long struggle of the two nations for supremacy in the New rld came to an end.

THE FISHERIES FROM THE PEACE OF PARIS TO THE REVOLUTION.

'o the American colonists the most important result of the conflict 1 France was, at that time at least, the termination of the efforts he French to monopolize the fisheries. During the two decades :eding the Peace of Paris the fishing industry of New England had :d to expand at a normal rate. Thousands of fishermen had :red the regular English navy, many had abandoned their peaceful ing for the exciting life aboard a privateer, and others had joined numerous expeditions sent against the French military posts in ıada. With the close of the war all conditions seemed propitious a rapid industrial and commercial expansion. The danger of a ign war was no more present, there was no longer a risk of molesta- ı of fishing and trading vessels by ubiquitous privateers, the range ndustrial and commercial operations was greatly widened, and a od of unprecedented prosperity seemed to be at hand. But, unfor- ately, the English King and his ministry announced that the time come for a radical change of colonial policy. It was declared that ceforth the trade of the colonies was not only to be regulated in such ay as to serve the interests of the English merchants and manufac- :rs, but also to be subjected to taxation, the revenue from which ıld contribute to the support of the imperial administrative system , perchance, even afford a surplus to help extinguish the large debt ırred in the acquisition of the imperial possessions.

asting around for a starting-point for the new colonial policy, the ish ministry hit upon the almost forgotten and long-neglected asses Act of 1733 as a measure exactly suited to their needs, and ounced their intention of enforcing its provisions to the letter. ir proposal met with the most vigorous protestations from the New ;land colonies. The prosperity of the fisheries which furnished the .s of New England commerce was dependent upon the West Indian le, and the English islands in the West Indies provided a market only one-third of the fish exported and furnished a still smaller tion of the molasses needed in the New England rum distilleries. General Court of Massachusetts stated that the enforcement of Molasses Act would cause a direct pecuniary loss to the colony of :ly £300,000 annually from injury to the fisheries, besides decreasing amount of importations from England by a sum almost as large. people of Rhode Island sent a long remonstrance to the Lords ımissioners of Trade and Plantations, stating that the total yearly luction of molasses in the British West Indies would not equal two- ds of the amount annually imported into their colony, and that the

Molasses Act of 1733, if revised and carried into execution, would bring utter destruction to all their industries and trade.[1] Notwithstanding these representations, the English Parliament passed the Sugar Act of 1764. By this measure duties considerably lower than those levied by the act of 1733 were imposed on foreign molasses imported into the colonies, and the importation of foreign rum was prohibited. At the same time, duties were levied on several other important colonial imports and preparations were made for the extension of the British system of stamp taxes to the colonies.

The ten years following the passage of the Sugar Act witnessed the gradual widening of the breach between the colonies and the mother country. Parliamentary measures to compel submission and obedience were met one after the other with evasion and resistance on the part of the colonies. One of the last efforts of England to force the colonies to submit was an act, passed in 1775, restricting New England's commerce entirely to English ports and providing that no vessel of New England should be permitted, except by special license, to engage in any fishery on any part of the coast of North America. In less than a month after the passage of this measure, the engagements at Lexington and Concord signalized the beginning of the Revolutionary War.

In spite of the oppressive commercial legislation following the French and Indian War, the commerce of New England had steadily expanded. By bribery or intimidation of customs officials, by using false certificates, and by smuggling, a large trade with the French and Spanish West Indies was continually maintained, and by means of this trade the fisheries grew more rapidly than at any previous time. It is estimated that during the ten years from 1765 to 1775 there were 665 vessels, of a total of 25,630 tons, and carrying 4,405 men, annually employed in the New England cod fishery alone.[2] In Maine the number of vessels was 60, with a tonnage of 1,000; the remainder belonged to Massachusetts. Marblehead and Gloucester were the leading fishing-ports, and Salem, Ipswich, Yarmouth, Plymouth, and Chatham all had cod fleets numbering 30 sail or more. Three hundred and fifty vessels, many of which were more than 100 tons burden, were employed in carrying the fish to markets in Europe and the West Indies. Altogether the fisheries furnished employment for upward of 10,000 men, and yielded a product approximating $2,000,000 a year in value. The colonial whale fishery in 1774 employed no less than 360 vessels, with an aggregate burden of 33,000 tons. Of these, 300 belonged to Massachusetts ports, of which Nantucket held the lead with at least 120, and the remainder were distributed among different ports of Connecticut, Rhode Island, and New York.

[1]Callender, *Selections from Econ. Hist. of U. S.*, 56.
[2]Amer. State Papers, *Commerce and Navigation*, I, 8.

EFFECT OF THE REVOLUTION UPON THE FISHERIES.

The opening of the Revolutionary War marked a complete cessation the fishing industry. In his *History of the New England Fisheries* . 121), Mr. Raymond McFarland graphically pictures the conditions the time as follows:

'For the first time since its beginning in the early part of the seventeenth ıtury, this ancient industry of the sea was wholly suspended. For a decade annals of the fisheries give place to records of war, to feats of daring on ıd and sea. What could be accomplished neither by raiding Indians, nor hostile French wars, nor by restrictions of Parliament, nor by two centuries battling with the storms of the ocean, was accomplished in a single season by war. The doughty schooners fled for refuge to their native harbors; lines, ɔs and sounding-lead were laid away in storehouses; cargoes of fish and salt re unloaded upon the wharves; captain and crew threw off their oiled rvels, and the seas were undisturbed by the white sails of fishing craft that d dotted their surface for more than five generations.

'But a wonderful transformation was at hand! Almost in a night the ınge took place, for, on another day, the largest vessels in the fleet were eding out of harbor once more to scour the seas in search of a new prey ıes and tubs had given place to cutlasses and swivels; out of the sounding-ds bullets had been melted; the hold of the vessel, once filled with salt and ı, furnished commodious quarters for a score or two of fighting seamen; rvels had been exchanged for American uniforms for men who were as eager w to train their guns upon British men-of-war as they had been but a few eks before to cast their lines on the Grand Bank of Newfoundland. In this y hundreds of fishing schooners were fitted out as privateers, manned by ıermen in numbers reaching into the thousands. Many fishermen enlisted the land service, too, and gave good accounts of themselves at Bunker Hill, enton, and other places. But the sea held by far the greater number of the isted fishermen. This was but natural, as the sea was their chosen home. l men who had been driven from the scene of their daily toil in securing a ng for their families found no better place for redressing their wrongs than the place where the wrong was committed."

The losses caused by the interruption of the fisheries can not be ermined. The loss in products must have been $15,000,000, and loss from the decay of wharves, vessels, and other property used fishing was unquestionably several hundred thousand dollars. The ıdition of the fishing-ports at the close of the war bore adequate timony as to the ravaging effect of the struggle upon the entire ustry. At Marblehead, for instance, the vessel tonnage decreased m 12,000 in 1772 to 1,509 in 1780, and the number of polls from 03 to 544. In 1774, Chatham employed 27 vessels in the cod fishery l in 1783 only four or five vessels were left in the harbor, and "the m was filled with widows mourning the loss of their husbands and ıs." The fishing industry in all its branches was virtually destroyed, l the people who had formerly depended upon it for their livelihood re reduced to destitution and misery.

In the negotiations for peace in 1783, the fisheries were an important ject for consideration, just as they had been an important factor in

the events leading up to the war for independence. Fortunately for New England, one of the commissioners who negotiated the treaty was John Adams, who, as a native of Massachusetts, thoroughly understood the importance of securing from England liberal concessions in regard to the fishing-rights of the people of the United States. By dint of arduous labor, Adams was able to achieve results that surpassed both the hopes of his government and the expectations of the New England people. The terms of the treaty in regard to the fisheries were expressed in Article III, as follows:

> "It is agreed that the people of the United States shall continue to enjoy unmolested the right to take fish of every kind on the Grand Bank, and on the other banks of Newfoundland; also in the Gulph of St. Lawrence, and in all other places in the sea where the inhabitants of both countries used at any time heretofore to fish. And also that the inhabitants of the United States shall have liberty to take fish of every kind on such part of the coast of Newfoundland as British fishermen shall use (but not to dry or cure the same on that island) and also on the coasts, bays, harbours and creeks of all other of His Britannic Majesty's dominions in America; and that the American fishermen shall have the liberty to dry and cure fish in any of the unsettled bays, harbours, and creeks of Nova Scotia, Magdalen Island, and Labrador, so long as the same shall remain unsettled; but so soon as the same or either of them shall be settled, it shall not be lawful for the said fishermen to dry or cure fish at such settlements, without a previous agreement for that purpose with the inhabitants, proprietors or possessors of the ground."

The privileges granted to the people of the United States by this article were practically equal to the privileges enjoyed during the colonial period. The securing of such favorable terms was one of the most satisfactory results of the treaty negotiations.

With the return of peace, efforts were immediately made to revive the languishing fishing industries. However, the long period of inaction had brought about changes which made recovery exceedingly difficult. The large fishing equipment had decayed or had been devoted to other uses, the fishermen had sought other employment, and their children were without training or experience in the fishing business. Moreover, the fisheries were dependent upon the foreign trade, and the new nation found that the commercial relations of an independent power with the rest of the world were quite different from the relations possessed by the colonies of a powerful and wealthy empire. England was no longer a protector, but a keen competitor. France and Spain were willing enough to lend encouragement and assistance to rebellious English colonies, but, the discomfiture of their hereditary foe accomplished, they displayed a decided aversion toward aiding the development of a new commercial rival. The British navigation laws, literally interpreted, not only excluded all vessels of the United States from trade with English colonies, but even prohibited them from carrying goods produced anywhere in America to the ports of Great Britain.

Shortly after the conclusion of peace, and annually thereafter for a umber of years, Parliament empowered the King to regulate the comercial intercourse of England with the United States. Orders in ouncil were soon issued placing vessels of the United States on praccally the same footing as British vessels with respect to the carriage ' produce of the United States directly to the ports of Great Britain, it there was no relaxation of the navigation laws with regard to the ade between the United States and the British West Indies. Moreer, for the purpose of promoting the British fisheries in America, the ders in council designating the commodities which British vessels ight carry from the United States to the British West Indies excluded h from the list. The English sugar-planters themselves earnestly ideavored to secure freedom of trade with the United States, but their forts were unavailing. The orders in council respecting the West idian trade were repeated from year to year, and in 1788 their prosions were embodied by Parliament into permanent law. In 1784 rance and Spain closed their colonial ports in America, thus excluding e shipping of the United States from all commerce with the West idies, except a small trade with the Danish and Dutch Islands. To ld to these adverse conditions, the Mediterranean trade of the United ates, now that the protection of England was withdrawn, was totally estroyed by the Algerian pirates. The prospects for a revival of mmerce were indeed gloomy.

However, the protestation of the sugar planters of the French West dies, the decline of the French fisheries, and a crop failure in France used the French government soon to relax the restrictions it had iposed. Once a number of important West Indian ports were open American vessels, the West Indian trade quickly recovered. Though e English laws were not modified, they were evaded or disregarded and merican provisions found access to markets in the British islands. rade with Portugal and Spain was renewed, and new markets were und along the Baltic and in the Far East. Beginning with 1786, the reign trade of the United States began to revive very rapidly, and 1788 it was as prosperous as it had been at any previous time.

With the revival of foreign commerce, especially of that with the 'est Indies, Portugal, and Spain, the New England cod fishery began recover. Between 1786 and 1790 it employed each year an average 539 vessels measuring 19,185 tons. The tonnage for 1789–90 was ,522, a thousand tons more than the average for the prosperous years om 1765 to 1775, and the quantity of dried and pickled fish exported 1789 was somewhat larger than the quantity exported in 1771. The ofits derived from the industry were not so large, however, as in rmer years, because of the advantage held in competitive markets by e fishermen of France and England, who were aided by large bounties anted by their governments. Nevertheless, the superior natural

advantages of the American fishermen enabled them to maintain and expand their business. At the time of the beginning of the new government the cod fishery seems to have been rehabilitated, though it was soon to be reduced to a temporary state of distress through losses occasioned by the import duties levied by Congress on salt and material used in fishing equipment.

Though the cod fishery recovered, the whale fishery did not. For some years before the Revolution, England had provided the market for nearly all colonial whale products and Parliament had encouraged the colonial whaling industry by granting preferential duties. Whale-fins were "enumerated" in 1766, and practically all the oil produced in the colonies was also sold in Great Britain. After the war, the English markets were completely closed to American shipments by prohibitive duties. Moreover, while whaling had been suspended, the people of America had grown accustomed to the use of tallow candles, and there was no large domestic demand for oil after the whaling industry was resumed. Prices fell far below what they had been before the Revolution. The fleets of Nantucket, New Bedford, and other whaling ports did not attain their former size. Some Nantucket whalemen went to Nova Scotia in response to inducements from the British government and a few others emigrated to Europe to carry on the whaling business at Dunkirk under the patronage of the French King. In 1789 the prospects of American whaling were made somewhat brighter by the opening of the French market to American products, but the hopes occasioned by this action were soon dispelled by the outbreak of the French Revolution. The adverse conditions of restricted market and low prices could not be overcome, and though the whaling industry continued, it remained on a precarious footing for more than a quarter of a century, and at times it seemed doomed to total extinction.

CHAPTER X.

AMERICAN COASTWISE TRADE BEFORE 1789.[1]

The beginning of the coastwise trade, 162. Conditions in the northern colonies favorable to coastwise trade, 164. British Navigation Acts and the colonial coastwise trade, 165. Evasion of the Navigation Acts, 166. Effects of the Acts, 167. Character and volume of the intercolonial coastwise trade, 167. The trade between the northern and southern colonies, 169. Statistics of vessel entrances and clearances in 1769, 171. Interstate trade after the Revolution, 172. Commercial provisions of the Constitution, 173.

The coastwise commerce of the continental colonies planted in nerica had its origin partly in the work of collecting commodities export and of distributing imported goods, and partly in the interange of the various colonial products. The Plymouth colonists ablished trading-posts along the New England coast, for the coltion of furs and other native commodities, from the sale of which ey secured the funds to pay their debt to the English investors who d furnished the capital for their colonizing venture. Governor Bradd records, too, that in 1627 a vessel came to Plymouth from the itch plantation of New Amsterdam, bringing "diverse commodities, sugar, linen cloth, Holland finer and courser stufes, etc." In 1631 vernor Winthrop built the *Blessing of the Bay* for trade with the other ntations, and he records that during the same year a vessel arrived m Virginia laden with corn and tobacco to be exchanged for fish.

To the Dutch who settled at New Amsterdam may be given the dit for being the first to develop an extensive coastwise commerce on ystematic basis. At the time the Dutch settlement was established, lland was the greatest distributing center of Europe. Like the city te of Venice in the fourteenth and fifteenth centuries, Holland was in seventeenth century a nation of traders. To the busy seaports of t country came the products of all parts of the world, to be redisouted, and in the outposts established by the Dutch trading comies the eager and energetic commercial activities of the Dutch ple found prompt expression. From New Amsterdam small vessels ed to the English plantations both to the north and to the south, hanging gunpowder, salt, clothing, and European manufactures of kinds for large quantities of tobacco, grain, fish, and furs, part of ich was consumed at the Dutch colony, but most of which was transted to the markets of Holland. In the ubiquitous Dutch trading-

[1] is chapter, which is intended to present a brief general account of the Coastwise Commerce . to 1789) was written by T. W. Van Metre, who consulted, in addition to the works referred the footnotes, the earlier chapters of an unpublished *History of the Coastwise Commerce of nited States* by Professor Thomas Conway, Jr. [Editor.]

vessels England found the greatest obstacle to her own commercial and naval progress, and it was only after a stubborn conflict that the restrictive commercial policy of the Commonwealth prevailed and the formidable rival was crushed. In 1664 New Amsterdam was seized by the English, and though the Dutch continued for a time to share in the American trade, and even recovered their colony for a brief period, their power in the American continent, both political and commercial, was broken, and before the close of the seventeenth century Dutch shipping virtually ceased to figure in either the foreign or the domestic trade of the English colonies.

Meanwhile, even before any attempt had been made to exclude the Dutch from the English colonial trade, the shipping of New England had begun to assume a position of no small importance in the intercolonial and over-sea commerce of America. During most of the first century of their existence the New England colonies had a surplus of grain for export, which, with fish and other provisions and imported wares from Europe, found a ready market in Virginia and Maryland as well as in the West Indies. From Virginia and Maryland large quantities of tobacco were taken coastwise to Boston and Salem, and, regardless of the admonition of Charles I, this product was then sold in the markets of continental Europe, while from the West Indies sugar and dyewoods were collected for export, and molasses was imported for the rum manufacture. Aside from the coastwise trade with the southern colonies, the New England people developed a thriving and prosperous trade along their own coasts, collecting at their important seaports the grain, fish, fur, and other products of the smaller settlements and distributing among them the imports from Europe and the other colonies.

There were several reasons why the colonies of New England, as well as New York, and, later, Pennsylvania, should develop a commerce to be carried on by their own people and in their own ships. In the first place, the comparative lack of native commodities which could be sold in England made it almost imperative that the people of these settlements should provide their own vessels to transport their surplus products to whatever markets they could find, and it was inevitable that a portion of the population should engage in trade as a means of securing a livelihood. The development of the fisheries gave a tremendous stimulus to ship-building, and both of these industries, as well as the rum manufacture and small-farm agriculture, were conducive to the growth of seaport cities, which became the centers of a thriving and prosperous commerce. With such advantages as cheap ships, little external competition, and well-located markets, the traders of the northern colonies were able almost completely to monopolize the intercolonial trade of the British possessions in America. In the South exactly opposite conditions prevailed. The two chief products,

tobacco and rice, were demanded in England, and English merchants sent out the ships necessary for their transportation. Agriculture, conducted on a large scale, was the chief industry, navigation and shipping remained undeveloped, few cities arose, and the number of merchants and traders was relatively small.

For the development of coastwise trade, conditions in the northern colonies were much more favorable than in the southern. In the former, the population lived near the sea, and, while there was a large number of ports to be found along the coast, it was from only a few of them that an important over-sea trade was carried on. To these larger ports numerous small shipments of articles intended for the export trade were carried from the other settlements, and from them were distributed the imported wares which poured in from Europe, Africa, the Western Islands, and the West Indies. To this business of collection and distribution was added the interchange of colonial products intended for domestic consumption, a trade which became increasingly important during the eighteenth century, when New England was compelled to rely for breadstuffs on the farms of Pennsylvania, New Jersey, and New York. In the South a large part of the over-sea trade was carried on directly from the plantation wharves which lined the numerous navigable rivers, a single plantation often being able to give employment to two or more vessels. The work of the collection of exports and the distribution of imports in small vessels was relatively unimportant, and consequently the local coastwise trade never approached the magnitude of the local trade of the northern colonies, where production was on a smaller scale, industry more diversified, and trading more active. The coastwise trade between the North and the South came to be of some importance, but it was small in comparison either to the local coastwise trade of the northern colonies or to the trade between the continental colonies and the West Indies—the most important branch of the inter-colonial trade. Only a small amount of southern products was consumed in the northern colonies, and the demand for the products of the northern settlements among the southern plantations was likewise relatively small.

It was not until after the close of the colonial period, when the cotton industry was established and the South began to supply raw materials for northern manufactures and to draw its subsistence from northern farms, that a large and valuable intersectional commerce was developed. During most of the colonial period Virginia and Maryland raised grain in sufficiently large quantities to have a surplus for export, and many of the southern plantations maintained small fishing industries to supply domestic needs. Rum was probably the most important domestic commodity purchased from New England, and even rum could be secured as easily from Jamaica as from Rhode Island. The exportation of the southern surplus to Europe fell for the most part into

the hands of British merchants, and though the carriers of New
land and New York collected some southern tobacco and ri
northern ports for shipment to Europe, the quantity was very sn
compared to that carried directly in the vessels of England.
shipping of England likewise carried to the southern planters m
the European imports which they consumed.

BRITISH NAVIGATION ACTS AND THE COLONIAL COASTWISE TRADE.

The enactment of the Acts of Trade of 1660, 1663, and 1673
tendency to crystallize the conditions of trade described above.
is, these laws practically gave control of the intercolonial trade
shipping of the northern colonies, made direct trade with Engla
most important branch of the commerce of the southern colonie
greatly limited the possibility of the expansion of the coastwise
between the two sections. The act of 1660 provided that all
sailing to the plantations from England, Ireland,[1] Wales, or B
were to give bond *at the port of departure* that if the vessels loade
merated commodities, they should be brought to some port of *En*
Ireland, or *Wales* or to *Berwick*, and "for all ships coming fro
other port or place to any of the aforesaid plantations, who b
Act are permitted to trade there, that the Governor of such E
Plantation shall before the said vessel be permitted to load on
any of the said commodities, take Bond . . . that such ship or
shall carry all the aforesaid goods that shall be laden on board
to some other of his Majesty's Plantations, or to England, Ir
Wales or Town of Berwick upon Tweed." The strict enforcem
this act would have meant, of course, that a vessel sailing from E
would not be able to transport any of the enumerated articles fro
colony to another, and that for the most part this trade would
to colonial vessels. There is no printed evidence available to
whether this apparent discrimination in favor of colonial vessel
ever rigorously enforced, but it is true, nevertheless, that the co
vessels did almost completely monopolize the intercolonial trad
not until after the Revolution did ships from England engage t
large extent in the carrying trade between the continental coloni
the West Indies.

Under the law of 1660 the colonists had perfect freedom of tr
enumerated commodities, and were able to secure them for thei
consumption at a smaller price than was charged the English cons
who was compelled to pay an import duty. This privilege, how
the colonial merchants soon abused, especially in connection wi
Virginia tobacco trade. It appears that after the tobacco was l
at a New England port no effort was made at the time of its reex

[1] Ireland was excluded from the plantation trade in enumerated commodities by the act
and subsequent laws.

tion to secure a bond that it would be shipped to some other plantation or to some port in England or Wales. Consequently the tobacco was carried directly to continental Europe, and not only did the English crown suffer the loss of the revenue it would have obtained had the tobacco been sent to England, but the English merchants were deprived of the commissions they would have received had the trade passed through their hands. It was estimated that in 1663 the English government was losing annually £10,000 on account of the activity of the New England merchants in the Virginia tobacco trade.

To prevent the loss of revenue and to compel the shipment directly to England of the enumerated commodities, beyond the amount actually demanded for colonial consumption, the act of 1673 was passed, levying export duties on enumerated commodities shipped from one colonial port to another, the duties being practically the same as the import duties paid on the goods when taken to England. For a time this law had but little effect. The New England traders smuggled tobacco out of the southern colonies and exported it to Holland and France as before. Moreover, they interpreted the law to mean that once they had paid the export duties required they were then at liberty to send the tobacco wherever they chose. After carrying tobacco to ports on the European continent they returned with cargoes of manufactures which, contrary to the law of 1663, were not "laden and shipped in England." These open violations of the Acts of Trade called forth a vigorous protest from British merchants, who in a petition[1] to the King in 1676 stated that New England was becoming the "great mart and staple" of all the colonies, and that England was being robbed of her trade and the King of his revenue. Notwithstanding the opinion of the attorney-general of England that the act of 1673 did not abolish the necessity of giving bond for the shipment of enumerated goods to some English dominion, the direct trade with the continent of Europe continued, and even after the passage of the act of 1696, which specifically provided that bond should be given whenever the enumerated articles were shipped and that the export duties should be paid just as often as these articles were sent from one colony to another, the illicit trade was carried on to some extent. Edward Randolph reported[2] in 1676 that Massachusetts took no notice of the Navigation Acts, importing enumerated goods of all varieties and transporting them directly to Europe. A favorite plan to secure tobacco was to smuggle it out of Carolina and the "Out Parts of Virginia,"[3] where it was possible to evade the payment of export duties. Robert Holden wrote to the Commissioners of Customs in 1679 that half a dozen Boston traders were receiving each year the greatest part of the tobacco of Albemarle County, upon which little of the export

[1] *Calendar of State Papers, America and West Indies*, 1675–76, p. 337.
[2] *Ibid.*, 466. [3] *Documents Relating to Colonial Hist. of N. Y.*, V, 30.

duty had been paid.[1] In a letter to the Commissioners of Customs in 1692 Randolph inclosed a forged certificate given by a Boston merchant, who he asserted had carried away 1,644 hogsheads of tobacco in three years.[2]

However, it is apparent that the act of 1673 had a restrictive effect on the coastwise trade. Governor Dongan of New York reported in 1687 that the law prevented New York from becoming a collecting port for the tobacco of Delaware.[3] And even the New England merchants are said to have paid the export duties on tobacco carried from Virginia to Boston and then to have shipped the tobacco to England, where import duties were paid.[4] There is little doubt that but for the Acts of Trade, Boston, New York, and Philadelphia would have competed actively for the trade of Virginia, and if so the coastwise commerce between the northern and southern colonies would have attained a much greater magnitude. The largest part of the colonial shipping belonged to merchants who preferred to carry the commodities which they themselves bought and sold. The carriage of tobacco and rice directly from the southern colonies to England apparently did not appeal to them as a profitable business and the field was left to the shipping of England. It seems also that the shipping owned in New England did not engage largely in the transportation of sugar from the West Indies to Europe, for when a law was passed in 1739 permitting the exportation of sugar directly to points south of Cape Finisterre, but limiting the carriage to vessels built and owned in Great Britain, there was no protest, except from the British carriers who owned colonial-built ships. In 1742 the privilege of entering the trade was accorded to them, but the New England ship-owner never received the same concession. In the same manner only the ship-owner residing in Great Britain was permitted by the act of 1730 to carry rice from Carolina directly to points south of Cape Finisterre, and the New England merchants and carriers never protested.

CHARACTER AND VOLUME OF INTERCOLONIAL COASTWISE TRADE.

While there is no source of information from which one may derive an accurate statement of the development of the coastwise trade during the eighteenth century, there is abundant evidence that indicates the general character of the trade and shows its relative importance. Next to the West Indian trade, the coastwise trade of the northern colonies was unquestionably the most valuable branch of commerce carried on by American merchants and shippers, though neither the West Indian trade of the colonies as a whole nor the coastwise trade ever attained during the colonial period the value of the total direct

[1] *Calendar of State Papers, America and West Indies*, 1677–1680, p. 372.
[2] *Ibid., America and West Indies*, 1689–92, p. 659.
[3] *Documents Relating to Colonial Hist. of N. Y.*, III, 393.
[4] Peter Force, *Tracts*, IV, No. 11, 8.

commerce between the colonies and Europe. Among the northern colonies, New Hampshire, Connecticut, New Jersey, and Delaware had comparatively little shipping engaged in the transatlantic or the West Indian trade, and their people sold their surplus produce at the important seaports of the neighboring colonies and bought at those cities the salt, clothing, sugar, tea, spices, wines, and manufactured goods which had been brought in from Europe and the West Indies. In 1725 the little colony of New Hampshire reported that its trade with Boston had a value of £5,000 a year.[1] In 1730 the General Assembly of Connecticut reported to the Board of Trade:

"The trade of the Colony is but small. Horses and lumber are exported from hence to the West Indies, for which we receive in exchange, sugar, salt, molasses and rum. What provisions we can spare, and some quantity of tar and turpentine, are sent to Boston and New York, and Rhode Island, for which we receive European goods."

Forty-two vessels, the largest of which was of a burden of 60 tons, belonged to the people of the colony. There was no trade with Europe "excepting only a few voyages to Ireland with timber and some few, one or two, that have of late been built here made their voyage to Bristol, there sold ship and cargo and brought their returns hither." All kinds of British manufactures, such as "woolen cloath, silks, glass, nails, scythes, pewter, brass and fire-arms" were imported, but they were nearly all purchased from the merchants of Boston.[2]

In the report of the Board of Trade on the state of the plantations in 1721, New Jersey was said to have no ships but coasting vessels, in which the colonists sent their produce, chiefly grain and cattle, to New York and Philadelphia, to be exchanged for English manufactures.[3] Regular packet service was established between all the more important northern ports, and both travel and trade among these cities grew constantly in volume. During the three years from June 24, 1714, to June 24, 1717, the vessels clearing from Boston to other ports on the continent numbered 390, with a tonnage of 11,589.[4] This was equal to the tonnage cleared for Great Britain and about one-third of the tonnage cleared for the West Indies. During the three years from 1715 to 1718 the clearances from New York for other continental colonies amounted to 4,234 tons.[4] Cadwallader Colden wrote from New York in 1723 that "several of our neighbors upon the continent can not well subsist without our assistance as to Provisions for we yearly sent Wheat & Flower to Boston and Road Island as well as to South Carolina, tho [not] in any great quantity."[5] In one week in May 1741, Boston received 6,650 bushels of corn, 200 bushels of peas, 180 bushels of beans, 534 barrels of flour, 291 barrels of beef, 278

---

[1] Weeden, *Economic and Social History of New England*, II, 589.
[2] *Public Records of Colony of Connecticut*, VII, 583.
[3] *Documents Relating to Colonial Hist. of N. Y.*, V, 603.
[4] *Ibid.*, 618. [5] *Ibid.*, 686.

barrels of pork, and 79 barrels of rice.[1] Governor George Clinton wrote to the Board of Trade and Plantations in 1749 that New York received from the northern and southern portions of the continent "Fish, Oil, Blubber, Whale Fins, Turpentine Oil, Seal Skins, Hops, Cyder, Flax, Bricks, Cole, Lamp Black, certain Wrought Iron, Tin and Brasiery, Joinery, various Carriages and Chairs," while to the English districts north and south New York sent "Provisions, Chocolate, Lumber, European and India Goods with those enumerated in the Plantation Trade Acts and such other Imported here for conveyance home regularly."[2] After 1730 New York refined sugar for sale to the other colonies.[3] Boston was the center of a large domestic trade in beef, butter, timber, fish, and rum, while New York and Philadelphia were centers for the collection and distribution of flour and grain. Boston would unquestionably have been the center of a considerable coastwise trade in domestic woolens, had it not been for the repressive policy of England. The hat-making industry of the northern colonies was also restricted, and as a consequence there was little trade in colonial manufactures, if one excepts breadstuffs, lumber, and rum.

The trade between the northern and southern colonies gradually expanded. With the increase of population there was a growing interchange of products, the tobacco, rice, and naval stores of the South being traded for rum, flour, fish, beef, pork, and European manufactured goods. In the report of the Board of Trade[4] above referred to several statements were made indicating the nature of the state of the trade between the North and South during the early eighteenth century. Maryland sent tobacco, beef, pork, and grain to the other colonies and received, in return, rum and sugar. Virginia likewise sold tobacco and provisions to the other plantations. North Carolina had but little commerce, and that was carried on by the sloops of New England, which brought clothing and ironware to exchange for pork, corn, pitch, and tar, the two articles last mentioned being carried first to New England and then to Great Britain. Few of the southern colonies possessed any shipping to speak of, the planters depending upon the merchants and carriers of Great Britain and New England.

During the early part of the eighteenth century an interesting coastwise commerce began between New England and the southern colonies, which, as Weeden says, "sheds light both upon the general development of coasting trade and upon the peculiar tendency of early New England enterprise to join capital and labor."[5] During the winter, when there was little fishing carried on, the owners of small fishing-sloops would load their craft with salt, rum, sugar, molasses, iron and wooden ware, hats, caps, cloth, handkerchiefs, and stockings, which they carried to

---

[1] Weeden, *Economic and Social History of New England*, II, 591.
[2] *Documents Relating to Colonial Hist. of N. Y.*, VI, 511. [3] *Ibid.*
[4] *Ibid.*, V, 591. [5] Weeden, *Economic and Social History of New England*, II, 590.

the southern colonies and peddled from place to place, returning early in the spring with a valuable lot of pitch and tar and supplies of corn and pickled pork. These trading expeditions of the fishermen were private ventures entirely, which offered a good opportunity to secure a profit even during the winter season from the investment in fishing craft.

Thus, while the most important portion of the commerce of the southern plantations was with Great Britain, the trade with the colonies of the north formed a regular feature of their economic life. Part of this trade was carried on in connection with the West India trade of the northern colonies, vessels stopping on the voyage each way, once to exchange rum and imported merchandise for staves, headings, and provisions for the sugar islands, and again to leave sugar, molasses, rum, and negroes. Occasionally slaves were sent from Newport and other northern cities to the southern plantations, but for the most part the slaves came either directly from Africa or from the West Indies. Goods which had been smuggled into New England from Europe were sold regularly in the South, though probably not in large quantities, and manufactures of all kinds from England were also distributed among the southern ports by the northern merchants. Peter Faneuil and Thomas Amory, Boston merchants, traded regularly with the southern colonies, and the merchants of New York and Philadelphia also bought and sold there. The volume published in 1914 by the Massachusetts Historical Society, containing a portion of the correspondence of several Newport merchants during the eighteenth century, throws some interesting light on the coastwise trade. The Newport traders had dealings with merchants at practically every port of any importance along the entire coast, selling rum, clothing, manufactures, and slaves, and buying provisions, rice, tobacco, and other native products.[1] That they met with competition is indicated by a letter from Charleston, South Carolina, in 1770, saying that the market there had been supplied with sugar from New York and Philadelphia.[2] That the Acts of Trade were not enforced with complete effectiveness is indicated by the sailing orders given a Captain Hammond in 1770 to take a cargo of rice, sugar, and ginger to Gothenburg or to Hamburg and lay out the proceeds in Bohea tea and other articles, which were to be consigned to one of the French Islands in the West Indies, but carried to Rhode Island and secretly unloaded.[3]

The volume of the coastwise trade of the colonies on the eve of the Revolution is indicated in table 9, showing the entrances and clearances at the ports of the northern and southern colonies in 1769. The statistics of the tonnage of entrances and clearances of the several individual colonies are given in table 5, on page 92.

[1] *The Commerce of Rhode Island*, I (Mass. Hist. Soc. Collections, 7th series, IX, 1914).
[2] *Ibid.*, 325. [3] *Ibid.*, 332.

TABLE 9.—*Gross registered tonnage of the vessels entered and cleared at the ports of the northern and southern colonies in 1769.*

	From Great Britain and Ireland.	Southern ports of Europe and Africa.	British and foreign West Indies.	Continent of America, Bahamas, Newfoundland, etc.	Total.
ENTERED.					
Total for northern colonies..	30,353	20,906	60,888	78,198	190,345
Total for southern colonies..	60,357	13,245	34,028	34,171	141,801
Total for all colonies..	90,710	34,151	94,916	112,369	332,146
CLEARED.					
Total for northern colonies..	31,675	21,888	63,651	72,875	190,089
Total for southern colonies..	67,446	20,713	32,731	28,323	149,213
Total for all colonies..	99,121	42,601	96,382	101,198	339,302
Total entrances and clearances........	189,831	76,752	191,298	213,567	671,448

The statistics in the fourth column of this table indicate fairly well the volume of the coastwise trade. Part of the entrances and clearances here indicated were for the trade with Newfoundland, Canada, Nova Scotia, Florida, Bermuda, and the Bahamas, and in order to consider only the trade among the thirteen colonies it would be necessary to make some subtraction, though at the most the deduction would not amount to more than 25,000 tons.[1] Even with this deduction the coastwise trade of the thirteen colonies would, from the standpoint of tonnage of shipping engaged, rank among the leading branches of colonial commerce. It may be safely assumed, however, that its value was less than that of the trade with Great Britain or of the West Indian trade. The most important feature which the table brings out is the difference in the character of the commerce of the northern and southern colonies. In the North the coastwise business took high rank in all the colonies, employing in Rhode Island and Connecticut practically

[1]The entrances and clearances of Canada, Nova Scotia, Newfoundland, and Florida, for ports of the continent of America, in 1769, were as follows (Raynal, *Histoire Philosophique*, IX, No. 3):

TABLE 10.—*Tonnage of entrances and clearances, continent of North America, 1769.*

	Canada.	Nova Scotia.	New-foundland.	East Florida.	West Florida.	Total.
Entered (tons)...........	2,246	4,495	3,087	1,097	375	11,300
Cleared (tons)...........	2,752	5,489	923	1,688	612	11,064

Lord Sheffield, in his *Observations on Commerce*, gives a table showing the entrances and clearances for all the English colonies in America in 1770. The total for the continental colonies was larger than for 1769, but the relative proportions were about the same.

one-half of the tonnage entered and cleared, and more than one-third of the tonnage of the entrances and clearances of Massachusetts, the leading commercial colony. Among the southern colonies the coastwise business held a much less important position. Direct trade with Great Britain, as shown in table 9, employed almost one-half of the tonnage of the entrances and clearances of southern ports, and the coastwise trade was represented by little more than one-fifth.

Like all the other branches of trade carried on in colonial vessels, the coastwise commerce was almost utterly destroyed during the Revolution. American ships which were not employed as privateers were compelled for the most part to lie rotting at the wharves until the war was ended, and though a small amount of trade was carried on among the colonies, the business was dangerous and therefore small and irregular. It was during these years that the need for home manufactures and better means of inland transportation were effectually demonstrated. It is of interest to note that almost as soon as the war ended, steps were taken to improve the inland navigation of Virginia and other States, in order that a sheltered waterway might be provided for at least a part of the distance along the Atlantic coast.

INTERSTATE TRADE AFTER THE REVOLUTION. PROVISIONS OF THE CONSTITUTION.

At the close of the war the coastwise trade was at once resumed. It was, in fact, the only branch of the old colonial trade of the American merchants and carriers which it was possible freely to take up again, the trade to the West Indies being forbidden by the Navigation Laws of Great Britain and the commerce with southern Europe ruined by the withdrawal of British protection against pirates. Direct trade with Great Britain immediately resumed its former volume, but, as before, it was carried on chiefly in British ships. For a time the coastwise trade prospered, but before long, in common with the other branches of trade, it experienced a severe depression. Credit everywhere was impaired, there was little money, and the various States, jealous and fearful of the commercial prosperity of one another, began to erect barriers that crippled the commerce of all. New York attempted to break up the trade of Connecticut and New Jersey by imposing heavy fees on every vessel entering from those States. Delaware and New Jersey tried to attract to their ports the foreign trade of Pennsylvania and New York by a system of legislation offering lower import duties and more favorable trade regulations. When Massachusetts and Rhode Island placed almost prohibitive duties on imports carried in British ships, Connecticut admitted such imports free, hoping to obtain a monopoly of domestic trade in British products. Several of the States imposed heavy duties on goods from all other States with the two-fold object of encouraging domestic production and of conserving the supply of coin. It was due primarily to the extreme need of a

system of uniform regulation of interstate and foreign trade that the Annapolis convention was held in 1786, the convention which called the meeting of the body that framed the Federal Constitution at Philadelphia in 1787.

The disputes among the makers of the Constitution over what power of commercial regulation should be given to Congress were exceedingly bitter, and in no other phase of the work of the convention did the opposing economic interests of the sections of the country stand out more clearly. The northern navigating and trading States wanted complete power placed in the hands of the Federal Government, but the southern delegates feared that Congress might at some time, if dominated by the commercial interests of the North, enact a navigation law excluding foreign carriers. The result of such an act could only be a tremendous increase in freight rates which would impoverish the southern planter and enrich the northern carrier. Almost unanimously, therefore, the southern delegates insisted that a provision be inserted in the Constitution by which Congress would be prohibited from enacting a navigation law unless by a two-thirds vote of both houses. Furthermore, the South demanded that Congress be forbidden to levy export duties or prohibit the importation of slaves. Out of these conflicting views a compromise was eventually reached. Congress was given general power "to regulate commerce with foreign nations, and among the several States, and with the Indian tribes," and empowered to levy import duties on the condition that they be uniform throughout the United States. However, it was stipulated that "no preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another; nor shall vessels bound to, or from, one State, be obliged to enter, clear, or pay duties in another," that "no tax or duty shall be laid on articles exported from any State," and that "the migration or importation of such persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the year 1808." Furthermore, it was agreed that "no State shall, without the consent of the Congress, lay any imposts or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws; and the net produce of all duties and imposts, laid by any State on imports or exports, shall be for the use of the Treasury of the United States; and all such laws shall be subject to the revision and control of the Congress." "No State shall, without the consent of Congress, lay any duty of tonnage or . . . enter into any agreement or compact with another State, or with a foreign power."

Before the new Constitution went into operation economic conditions in the United States began to take a turn for the better. Washington wrote to Jefferson in 1788: "The people have been ripened by misfortune for the reception of a good government. They are emerging

from the gulf of dissipation and debt into which they had precipitated themselves at the close of the war. Economy and industry are evidently gaining ground. Not only agriculture, but even manufactures, are much more attended to than formerly." Under the stimulating influence of renewed industrial activity the trade among the States quickly revived. Not only in the commodities of the colonial period did trade expand, but in the products of the growing manufactures and the imports from the newly opened East India markets a healthy domestic commerce sprang up. However, at the time the new government was launched, there was as yet no indication that the coastwise trade would ever occupy a more important relative position than during the colonial period, when it was exceeded in value both by the direct trade with Europe and by the West Indian trade. Domestic trade of great volume occurs only when there is a sectional diversity of products for which there is a great intersectional demand. Diversity of production of this kind did not exist to a large extent during colonial days, and even at the time of the adoption of the Constitution there was no indication that conditions favorable to a large interregional domestic commerce would soon arise. But two events, one occurring within a little more than a year after Washington's inauguration and the other four years after, foreshadowed a fundamental change in the economic organization of the nation. The first was the building of a cotton-mill by Samuel Slater at Pawtucket, Rhode Island, and the second was the invention of the cotton-gin by Eli Whitney. Out of the change heralded by these two events was to grow a domestic commerce, both coastwise and internal, more valuable than the foreign or domestic trade of any other nation of the world.

CHAPTER XI.

THE ORGANIZATION OF AMERICAN COMMERCE IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES.

Place of the trading companies in early commerce, 175. The period of the merchant carrier, 178. Reasons why merchants were their own carriers, 179. Size of the *Mayflower* and other vessels, 181. Effects of British legislation upon colonial trade, 182. Trade conditions following 1783, 184. Effect of the establishment of the National Government, 184. Direct trade with the Far East, 185. Early merchant princes, 185. Appearance of the common carrier on the sea, 186. Charter traffic, 187. Attempts to establish line services between Europe and America, 188.

The merchant and carrier, at all times, adapt their methods, as fully as they can, to the work to be done; and trade management advances with the progress of economic organization. The activities of foreign merchants and ocean carriers are conditioned, first of all, by the status of industry and inland transportation, by national monetary systems, and by the extent to which domestic and international credit and banking institutions have been developed.

Political conditions and ideals, also, affect both the scope of commerce and the methods followed in carrying on trade. The existence or absence of an efficient central government will almost certainly aid or hinder the growth and organization of both inland and over-sea commerce; national ideals, such as found expression in the "mercantile system" and are embodied in present-day tariff laws, modify commercial evolution; while warfare and international recriminations have frequently interrupted the peaceful progress of trade.

The purpose of this chapter is to state briefly how American maritime commerce was carried on during the seventeenth and eighteenth centuries, to describe how American commerce was developed by British and colonial merchants under seventeenth and eighteenth century conditions. The account must necessarily begin with a brief reference to the trading companies by which the first colonies were planted in America.

PLACE OF THE TRADING COMPANIES IN EARLY COMMERCE.

The chartered companies that established settlements at Jamestown, Plymouth, New Amsterdam, and Boston were given the monopoly of the commerce of the regions granted to them. These companies expected to make money by reserving to themselves the exclusive conduct of the commerce of the American plantations; but experience soon showed that the companies, as such, were not effective trade managers. Their monopoly of commerce proved to be of advantage neither to the companies nor to the colonies. As the colonies grew, it

became evident that the trade between America and Europe could be carried on best by the merchants of England, the planters, traders, and fishermen of America, and, in course of time, by the merchant-traders of New England and the middle colonies.

The trade monopoly given the chartered companies was not only in harmony with the general practice of the sixteenth and seventeenth centuries, but was justified by the nature of the task which the companies assumed when they undertook to plant and maintain colonies in America. It was known that, even under the most favoring conditions, the plantations in the New World could hardly be expected to give rise immediately to a profitable commerce. Capital must be invested by the adventurers without returns for a period of years. The first division of profits, in the case of the Virginia and Plymouth companies, was to be made at the end of seven years, and by the second charter secured by the Virginia Company, in 1609, the distribution of the accumulated earnings was to be made in 1616. During the early years of experimental struggle to establish the American settlements, the commerce with America was not so much the exchange of commodities as the contribution of food and supplies by the companies to their plantations. The obligations assumed by the companies in return for their trade monopoly and their political powers proved to be much greater than the favors received; thus in a comparatively short time the trading companies went out of existence.

The Virginia Company decided in 1619 to permit outsiders to trade with its colony. Five years later, the King terminated the company's charter by quo warranto proceedings and Virginia became a crown colony. After that, the merchant traders of England and the planters in Virginia (the latter acting through their "factors" in England) slowly built up the large over-sea commerce of the colony.

In the case of Plymouth, the colonists, in 1627, made a financial settlement with the "adventurers" who had advanced the funds to start the colony. By this arrangement the colony secured control of its commerce when, seven years after the settlement of the colony, the time had come for the adventurers in England to make the first division of profits. The Plymouth Colony, in 1627, formed itself into a company and bought out the rights which the adventurers resident in England had in the property in New Plymouth, and the colony—*i. e.*, the company into which the colonists had formed themselves—decided to give to their eight leading men exclusive trading privileges for six years. These eight men, the "undertakers," accepted this trading monopoly not for their own gains, but that the profits of trading might be applied to the payment of the debt of £2,400 which the colony had incurred in settling with the adventurers.

The commerce of New Netherland was strictly monopolized by the Dutch West India Company from 1621 to 1638. Previously, in 1614,

the Amsterdam Company had been given the monopoly, for four years, of the trade of the Dutch possessions in America. The trade of the Amsterdam Company consisted of bartering with the Indians to secure furs, and this was the characteristic of commerce until some years after the Dutch West India Company had established permanent settlements in New Netherland. When, in 1638, the West India Company opened the trade of New Netherland to individual merchants resident in the colony, it required them to ship their goods in the company's vessels, and carefully regulated both the over-sea commerce and the traffic with the Indians. The merchants had to pay a duty of 10 per cent on imports and 15 per cent on exports. This was deemed necessary for revenue purposes; while the careful regulation of the trade with the Indians was imperative in order to prevent unscrupulous individuals from selling firearms and rum to the red men. The safety of the colony as well as the continuance of the fur trade depended upon this regulation.

The commerce carried on at New Amsterdam consisted both of the direct trade of the colony with Holland and of the indirect trade of the merchants of Holland with the tobacco colonies of Virginia and Maryland and with southern New England. The success of the Dutch merchants in securing the export trade of the British colonies, even to England, was such as to cause Parliament to pass the Navigation Acts of 1650 and 1651, requiring the use of English and colonial ships to bring colonial goods to England; and the British Act of Trade of 1660 included tobacco, the chief basis of the Dutch trade with the English colonies, among the enumerated articles that might be sold only in the English realm. For thirty years before this Act of Trade became a law there had been a continuous trade between Holland and the tobacco colonies in America. Some of the Amsterdam merchants who engaged in this commerce were Englishmen. The ships from Holland sometimes made direct trips to and from the Chesapeake, although it is probable that the traffic was more largely carried on via New Amsterdam.

The Dutch had developed this trade during the Civil War in England and it continued during the Protectorate in spite of Cromwell's vigorous measures. The British Acts of Trade of 1660 and 1663 confined the Dutch trade in America to New Netherland, and the conquest of that colony by the English in 1664 practically shut Holland out of the commerce with continental America. The elimination of the West India Company from New Netherland ended the monopolization of American commerce by trading companies; henceforth in all the colonies commerce was developed by English and colonial merchants subject to such restrictions as were contained in the British Acts of Trade and in colonial laws for the regulation of commerce and shipping.

In the proprietary colony, Maryland, there was no restriction placed upon trade. From the start it was open to individual traders; and

the early commerce of Maryland, as well as that of Virginia, after 1619, was carried on by English and Dutch merchants. The Acts of Trade prevented the Dutch merchants from engaging in the business and restricted the market of the principal export commodity to England. As the plantations grew larger, some planters sent their crops in their own vessels to their factors in England; and the merchants of New England, as they enlarged their coasting traffic, carried the products of New England, and also some of the supplies imported from Europe, to Virginia and Maryland to exchange for tobacco to be marketed in England.

The Carolinas, Pennsylvania, and Georgia were settled some time after the trading companies had made their unsuccessful attempts to monopolize the commerce of the colonies they had planted. The early commercial history of New Jersey was associated with that of New Netherland and New York, while Delaware was, at the beginning, a part of Pennsylvania.

THE PERIOD OF THE MERCHANT CARRIER.

The competitive organization of American commerce under the management of individual merchant traders prevailed throughout most of the seventeenth century and all of the eighteenth. American trade during these two centuries was carried on mainly by merchants who owned their own ships and were their own carriers. The trader did not pay freight to another man or to a company that owned ships and that acted as a common carrier. The ocean ship, like the warehouse or the store, was a part of the equipment of the merchant. At the present time the international trader and the ocean carrier are distinct. The merchant usually neither owns nor operates ships. He may charter one or more from time to time; but, for the most part, he buys transportation either of those who operate lines of sail or steam vessels or of those who own one or more vessels which may be chartered for a particular service or for specified times.

The transportation services of maritime commerce may be performed by one of three classes of persons:

(1) By the producer or manufacturer, who acts as his own merchant and himself takes his wares to the over-sea market. To some extent this was done by the tobacco planters of Virginia and the rum manufacturers and the fishermen of New England. The Standard Oil Company is to-day a conspicuous instance of a producer that operates ships.

(2) By the merchant or trader who owns and operates such vessels as his business may require. This trader's main business may be that of merchant with capital invested in one or more stores, warehouses, and piers, as well as in ships; or the trader may be merely the owner or master of one or several ships—the itinerant ocean trader who buys or

barters in whatever markets give promise of greatest profit. T merchant trader, ashore or afloat, carried on most of the maritime co merce of America till after the opening of the nineteenth century.

(3) By common carriers, by those who operate vessels as lines or single units, and charge freight rates for their services. This is ch acteristic of ocean transportation to-day. Only a few producers a merchants operate ocean vessels, while both producers and trad depend upon common carriers for the transportation services. make it possible for widely scattered shippers to secure ocean tra portation readily, freight forwarders and ship-brokers act as int mediaries between shippers and carriers, while each company operati a line of vessels maintains an agency or many agencies in order secure the traffic required to keep the ships profitably supplied wi freight. This organization of maritime commerce differs as grea from that prevailing in the eighteenth century as present internatio exchanges are unlike the over-sea trade of colonial days.

The reasons why the maritime commerce of America was carri on for nearly two centuries almost entirely by merchants and in vidual traders, and why ocean transportation did not become an orga ized service performed by common carriers who were not merchan becomes evident if but a superficial survey be made of the mann in which industry was conducted and of the conditions prevailing up the high seas.

Until some time after the opening of the nineteenth century, indust was still in the stage of small-scale, individual production. T era of large enterprises and big corporations had not arrived, and co not be ushered in, at least in America, until capital had become m abundant, until an economical system of inland transportation h been provided, and until mechanical inventions had cheapened t costs of production. The ocean carrier adapted to the industr conditions of the eighteenth century, to the irregular shipments small, dissociated, and scattered producers and merchants of that tin was the small vessel owned by the producer or merchant. Such craft could wait upon traffic or be readily built when required, a when loaded, could be sent anywhere in search of the market where cargo might be most profitably sold or be bartered for other goods.

The commerce of the seventeenth and eighteenth centuries w largely barter, the direct exchange of goods for goods. With few exc tions, the producer or merchant did not and could not sell his goo until they reached the over-sea market. There were no telegrap and cable connections with distant markets; there was no way as present of selling goods in advance of shipment, to be delivered at specified future date. Even the mails were of little, if any, aid to t producer or merchant. There was no regular mail service betwe Europe and America, and the only means of getting letters across t

ocean was to intrust them to the obliging captain of the next vessel to sail to the part of the world to which the letters were destined. The brig or ship might not sail for some days or weeks, the voyage might take six weeks or three months, and the letters could not be delivered promptly upon the arrival of the vessel at destination, unless the person to whom the mail was addressed lived in the vessel's port town or city. Ordinarily, a trader would be fortunate, if he got a reply from across the sea within six months after he wrote a letter of inquiry.

Being thus completely disconnected from his distant market, the merchant had to take or send his goods in his ship to the buyer. What the cargo brought, in coin or goods, after it had reached the end of the slow and uncertain ocean passage, depended upon the market conditions prevailing at that time; and the value of goods at any place, even at the largest commercial centers, was determined by the local trade situation. The electrically unified world-market of to-day did not exist.

Not all trade was barter of goods for goods. In the Spanish, French, and Portuguese markets of the West Indies and of Southern Europe, goods from America were paid for partly in coin; and in the West Indies, more especially in the British islands, bills of exchange on London were obtained by American merchants; but without a regular ocean mail service, without steamships and cables, international banking could make little headway and could do little to aid in the organization of international trade.

It was, however, the dangers to which commerce on the high seas was subject in the seventeenth and eighteenth centuries and until the close of the Napoleonic wars that more than anything else made impossible the handling of international trade in large units and the systematic organization of the service of the common carrier distinct from the mercantile business. In the seventeenth century and during the early decades of the eighteenth, piracy was so universal as to cause the black flag to be a familiar sight on the ocean and even in the ports of the southern colonies as far north as the Chesapeake. As the eighteenth century advanced, the pirates were quite generally driven from the seas, but were tolerated in the Mediterranean even into the nineteenth century.

On the whole, privateering was more destructive to commerce than was piracy. Five long wars added dangers to American commerce during the eighteenth century—the wars of the Spanish and Austrian Successions, the Seven Years' War, the American Revolution, and the earlier years of the long conflict started by the French Revolution. For more than 30 years during that century the merchants engaged in American trade had to take the risk of their goods and ships being captured by warships or privateers.

Under conditions of such frequent warfare there could ordinarily be no regular and advertised sailings of vessels over established ocean

routes. The ocean "line" and, indeed, the ocean carrier, publicly seeking traffic were impossible. The merchant loaded his goods into a small and preferably swift sailing vessel and quietly dispatched the ship in charge of a hardy captain and crew who recked little of danger, though they carefully avoided risk of capture by pirates or other foes. Like the Merchant of Venice, the merchant trader of the eighteenth century might well say:

> . . . "I thank my fortune for it,
> My ventures are not in one bottom trusted,
> Nor to one place; nor is my whole estate
> Upon the fortune of this present year."

That the ocean commerce of the first two centuries of American history was composed of small shipments, *i. e.*, was handled in small units, is clearly shown by the size of the vessels employed. The character and volume of trade, of course, determined the size of the carrier used for ocean transportation.

The *Mayflower* was a typical deep-sea vessel of the early part of the seventeenth century. It was a three-masted, double-decked ship barely 100 feet long and between 20 and 25 feet wide. Governor Bradford states in his diary that it was "of burden about 9 score," 180 tons, which would be the equivalent of about 120 tons gross register. There were 102 Pilgrims and the ship's crew on the *Mayflower*. The *Speedwell*, which started across with the *Mayflower*, was "of some 60 tuns," or one-third the size of the *Mayflower*. The *Speedwell* proved unseaworthy and had to be left in England, not because she was small, but because she was leaking (or the captain may have been treacherous). Bradford says that "after she was sould & put into her old trime, she made many viages & performed her service very sufficiently, to ye great profite of her owners."[1]

At the close of the eighteenth century, the large vessels operated in the transatlantic trade were the three-masted ships and barks of 200 tons gross register, but they were above the average. Brigs (two-masted, square-rigged vessels) were more numerous than the full-rigged ships were in the over-sea trade. The ordinary brig would be of 100 to 150 tons burden. Smaller vessels than this—snows, schooners, and even sloops—were used to carry freight across the Atlantic.

During the three years ending with 1789 the vessels clearing from England for America averaged 190 tons, gross register, each; those entering England from America were of 176 tons average. The English writer, Richard Champion, in his book *Considerations of the Present Situation of Great Britain and the United States of America*, published in 1784, placed the number of ships engaged in the American-European trade at 1,220, with a total gross register of 195,000. This would make

[1]Davis (ed.), *Bradford's Hist. of Plymouth Plantation*, 85.

the average tonnage of each vessel 160 tons. Champion's figures as to the number and tonnage of vessels engaged in the West Indian and coasting trade of the American States in 1784 show an average of 68 tons register per vessel. These figures indicate the size of vessels employed in ocean commerce near the end of the eighteenth century. For the smaller trade of the previous century yet smaller vessels were constructed; the craft each man built or bought at any given time presumably would be such as his business required. Neither commercial organization nor the shipping employed in commerce underwent any radical change during the eighteenth century.

EFFECTS OF BRITISH LEGISLATION UPON COLONIAL TRADE.

After the middle of the seventeenth century, the trade of the colonies had to be carried on subject to the commercial legislation of England and the regulations and laws adopted by the colonial governments. The effects of British and colonial legislation upon trade may be briefly stated.

The general purposes of the British Navigation and Trade Acts were: (1) to require the trade between the mother country and the colonies to be handled in ships owned and built in England or the colonies; and (2) to give, as far as practicable, the merchants in England a monopoly of the trade of the colonies.

The Navigation Acts, which excluded the Dutch and other foreign ships from the trade of the colonies with each other and with England, aided both the ship-builder and the merchant in the colonies. The fishermen and traders of New England, the merchants of the middle colonies, and to some extent the planters in the South were encouraged by the British Navigation Acts to build or buy vessels with which to market their goods. Had the colonial commerce been open to the ships and traders of all nations, the maritime trade of the colonies would hardly have been handled to the extent that it was by colonial ship-owning merchants.

In the fisheries, the intercolonial trade, and the commerce with the West Indies, American-built vessels were used and the colonial merchants were supreme. In the commerce with Africa, Spain, and Portugal, the colonial traders and ships had the advantage; but in the commerce with the mother country the English merchants had the main share of the business throughout the colonial period. They had the capital with which to develop the trade, British legislation favored them, and they were located in the country where the colonies, as a whole, sold the major share of their exports and from which the colonists imported most of their manufactures and other supplies. As the eighteenth century advanced, an increasing share of the ships used by British merchants was built in America, and a growing portion of the trade was handled by the colonists; but it was some time after the

close of the Revolution—the last decade of the eighteenth before the control of the transatlantic trade of America the owners and operators of American ships. The Napol gave American merchants their opportunity, and the est of our National Government under the Constitution made it the people of the United States to take advantage of that op

The British Acts of Trade were a handicap to the colonial in so far as those laws prevented or burdened direct trad colonies with non-British countries in the articles "enumerat laws of 1660 and later years. It was the aim of the English m and they were supported by the British Parliament—to ha the over-sea trade of the colonies, with such exceptions as t merchants and government chose to make. The merchants had their factors to represent them in the colonies; foreign tr not allowed to have factors in the British colonies; and i expected that the colonists should become merchants. Th remain fishermen, farmers, planters, and producers of food materials as England required. The enforcement of this pol impracticable. Through most of the century following 166 of Trade were but intermittently and partially enforced. Th took the leading part in organizing and developing their tra commercial as well as their political development was in autonomous.

England's import duties on grain and fish and her prohibi importation of salted provisions caused the New England a colonies to give extra efforts to the development of their the West Indies by means of which they secured coin, bills of and commodities to send to England for the purchase of ma and other necessary supplies; thus, the "corn laws" and ot of the mother country caused the colonies to engage more la would otherwise have been necessary in indirect or thre trading. England's policy of protecting her fishermen and owning class, in so far as it hastened the growth of the W trade of the colonies, tended to build up a trade carried on b merchants without competition from those in England an effect of making the organization of American commerce in autonomous, or independent of that of England. When came to try to tax colonial commerce, he was surprised to fin colonists felt that their commerce was peculiarly their own, they themselves had built up in their own way, something w alone ought to tax.

The laws of some colonies made the import duties or t duties, or both, lighter in the case of trade carried on directl over-sea country than in the case of commerce handled indi the port of some other colony or country. Likewise, som

favored domestic ships both by granting their cargoes a reduction in import or export duties and by imposing lighter tonnage taxes on vessels owned within the taxing colony than on ships belonging to nonresidents. Each colony that had such laws was trying to assist in building up a trade carried on by its own merchants, in their own ships, and directly with distant markets. The colony was applying to the organization and conduct of its trade the principles of the mercantile system, in so far as the Acts of Trade of the mother country, which were based on the same principle, permitted this to be done by the colony. The colonies derived their commercial theories and practices from England.

By the Revolution, which ended in 1783, the colonies achieved political, but not commercial, independence. Their transatlantic trade continued to be mainly with Great Britain and not with the continent of Europe; and the English merchants, after as before the war, carried on the larger share of the commerce between Europe and America. It was the British traders who had the stock of goods for supplying the American market reopened in 1783 at the close of the long war; and, of course, the imports from England came to the United States in British ships. Moreover, these and other British ships could alone be used by such American merchants as traded in the British West Indies after the Treaty of Paris was signed. When the United States became to Great Britain a foreign nation, the British navigation laws excluded American ships from the trade of the English colonies; and although trade between the United States and the British West Indies did not thereby cease, its growth was hampered and American merchants were handicapped in their competition with those of England, especially until the great war between Great Britain and France made it necessary for the London government temporarily to tolerate the use of American ships in the trade of the British islands.

During 1785 and 1786 there was trade depression in the United States. Business revived during the ensuing three years, but the decentralization of political authority among the States, the absence of a national monetary system, the inchoate international relations, the insufficient supply of capital, and the severity of the competition with the British merchants so hampered the mercantile, the shipping, and the industrial interests as to convince the leaders of America that political integration must precede the satisfactory organization and expansion of American commerce.

American commerce upon an enlarged scale was made possible by the establishment of the National Government and its wise administration under Washington. The constructive work of Alexander Hamilton in emphasizing the necessity of drafting a Constitution that gave the central government effective powers, in persuading the States to adopt the Constitution, and in building solidly the foundations of the fiscal,

financial, and credit institutions of the new nation give him an undisputed place among the greatest of American statesmen. He it was who made it possible for American merchants so to organize and expand American trade during the first two decades of our national life as to enable the United States, in spite of damages done, during the ten years ending in 1815, by French reprisals, British impressment, the unwise embargo and non-intercourse acts, and the three years' war with Great Britain, to gain and hold, during the first half of the nineteenth century, a position in the trade of the world second only to that occupied by the United Kingdom.

DIRECT TRADE WITH THE FAR EAST.

There was one important advance made by American merchants during the critical years intervening between the end of the Revolution and the beginning of the National Government under the Constitution. The East India Company had long held the exclusive right to trade in the British East Indies; and, having this monopoly, the company had little incentive to push the commerce either of the British Indies or of other eastern countries. The Americans saw their opportunity to trade directly with India and China instead of buying East Indian and Oriental products and wares in London after the commodities had been brought there by the East India Company. In 1784, New York merchants dispatched the *Empress of China* to Canton; the following year Elias Hasket Derby, of Salem, sent his *Grand Turk* out to Mauritius, India, and China; and soon Boston and Philadelphia merchants, as well as those of New York and Salem, were carrying on a direct trade with the countries about and beyond the Indian Ocean. The cottons, silks, and teas of India, the teas, silks, and porcelain of China, the spices of the East India Islands, and the many other articles from the East were generally sold in America with large profit to the importers, and this trade helped to build up the fortunes of the first merchant princes of America.

Salem, under the leadership of Derby, was very active in pushing the long-distance trade with regions beyond the Cape of Good Hope. It is stated by Marvin[1] that "of the fifteen American ships at Canton in 1789, five hailed from Salem, and in 1790 there came into port consigned to Mr. Derby 728,000 pounds of China tea." This trade of Salem with the East grew for several decades. At the opening of the war of 1812, that port had 126 vessels in its deep-sea fleet, and of that number 58 were Indiamen.

During the last two decades of the eighteenth century and the first dozen years of the nineteenth, one characteristic of the organization and conduct of American commerce was the prominent place occupied

[1]*The American Merchant Marine*, 198; Marvin's information was gotten from the *Historical Sketch of Salem*, by Osgood and Batchelder.

by the large traders typified by such merchant princes as Elias Hasket Derby, of Salem, and Stephen Girard, of Philadelphia. The activities of such traders as these show that industry had so developed in the United States by the end of the eighteenth century, and capital had so accumulated, as to permit commerce to be organized upon a relatively large scale. It was still handled in small units; but it was widely distributed among the countries of the world; and was carried on, not only by small producers and traders, but also by large merchants, each operating a fleet of vessels and each having more than a local mercantile business.

When Derby died in 1799, he left an estate of a million dollars or more, a large fortune for that day. At one time he owned about 40 vessels, with which he traded in the Baltic, the Mediterranean, the West Indies, India, the East Indies, China, and the Philippines.

Stephen Girard was first a merchant trader, then a banker. He prospered in both lines of business, lived until 1831, and left an estate of $9,000,000. His mercantile activities were carried on mainly between 1780 and 1812. He gave most attention to the West Indian trade, but his vessels were also sent to Europe and the East Indies and China. The captains in charge of his vessels were encouraged to act as roving merchants. This method of carrying on commerce was, of course, practiced by the owners and masters of other ships than those in Girard's fleet; but Girard may be said to have been especially successful in multiple trading. "His vessel went to the West Indies, where cargo was exchanged for coffee and sugar; then proceeding to Hamburg or Amsterdam, the coffee would be sold for Spanish dollars or exchanged for cargo which would secure him at the Spice Islands, Calcutta, or Canton the products of those climes."[1]

APPEARANCE OF THE COMMON CARRIER ON THE SEA.

It was almost two centuries from the termination of commercial monopolies possessed by the trading companies that planted the first colonies in America to the establishment of the Black Ball Line in 1816, the first organized common carrier engaged permanently in the over-sea commerce of the United States. During these two centuries the trader, whether he was a producer or a merchant, was his own carrier. The shipping and mercantile interests were identical, except in so far as the fishermen, lumbermen, and planters sent their commodities to market in their own ships. The merchant trader, by his individual organization and conduct of commerce, built up a large and widely distributed market for American products; and, as the volume of exchanges increased, the most successful traders became the wealthiest men of their time, the merchant princes of the beginning of the nineteenth century.

[1] J. R. Smith, *The Ocean Carrier*, 92. (The quotation is from Henry Wairey's *Girard College and its Founder*, 16.)

Toward the end of the second decade of the nineteenth century, a new method of carrying on American commerce began to be adopted. It had become possible and profitable for common carriers who were not merchants to perform the service of ocean transportation. When the Napoleonic wars came to an end and the second war of the United States with Great Britain was over, vessels were safe on the high seas. Piracy had been finally exterminated when the American navy brought the Barbary States to terms; and now, in 1815, the privateers were called home, and the long-dreaded warships became the protectors instead of the destroyers of commerce. A common carrier might operate a line of vessels with a regular schedule of sailings without danger of the loss of ships by capture.

Traffic conditions made possible the profitable maintenance of line services between America and Europe. The growth of the United States in population and in industrial activities gave rise to an over-sea trade large enough in volume and regular enough in flow to furnish tonnage and passengers for line ships dispatched on fixed dates. It is the certainty of traffic quite as much as its amount upon which the success of line services depends.

The separation of the trading and transportation services, like other economies in industry connected with the division of labor, required the employment of capital in larger units. It meant changing from small-scale to larger-scale industry in the ocean transportation business. Had it been safe for line vessels on the high seas before 1815, and had the volume and flow of commerce made probable the success of their services, the capital could doubtless have been secured by Americans for the purchase and operation of lines. Certain it is that when the Treaty of Ghent and the battle of Waterloo made the ocean safe, and the revival of industry made the volume of traffic fairly dependable, capital was found for the establishment of ocean lines.

Charter traffic was not of great importance in the seventeenth and eighteenth centuries, nor, indeed, till after the middle of the nineteenth, although the practice of chartering, or hiring, ships is probably as old as that of leasing houses. From the early days of maritime commerce, producers and merchants temporarily in need of vessels have individually or jointly hired ships when they were available. The "adventurers" who financed the planting of the Plymouth Colony purchased the *Speedwell*, but hired the larger ship *Mayflower*; and, it may be remarked incidentally, they criticized the Pilgrims severely (though unjustly) for detaining the *Mayflower* at New Plymouth through the winter of 1620–21 and dispatching her back to England without cargo.

The demand for chartered vessels first became general when industry made possible the importation of crude materials or the exportation of the products of agriculture, mining, or manufacture in full-cargo lots. During the latter half of the nineteenth century, charter traffic came

› be of great volume, and a large amount of capital was invested in tramp" ships, sail and steam, whose owners, acting as common ırriers, secured, with the assistance of ship-brokers, bulk cargoes for ıe transportation of which the shippers paid stipulated freight rates. ı general, it may be said that charter traffic came to be a prominent ;ature of ocean commerce after merchants ceased to own and operate ıe ships needed for their trade.

The separation of the services of the carrier and the merchant came bout gradually, and began earlier in Great Britain than in the United tates. In 1807, the Society of Shipowners of Great Britain published volume entitled a *Collection of Interesting and Important Reports and apers on the Navigation and Trade of Great Britain, etc.*, to assist in :curing certain desired legislation by Parliament; and the introduc-on to this book (p. xxvi) contains the following significant paragraph:

"The Society of Ship-owners think it important to state that the numerous ›dy of Men whose Capitals are embarked at this time in British Shipping are ›t engaged in other Mercantile pursuits, but depend wholly on the returns ıey expect to receive from their property so employed. This observation is ›nsidered the more necessary from recent inquiries which have been made to ıcertain who the Ship-owners were, they never having been before considered ıstinct from the Merchants, and that the property in Shipping had generally be-nged to that very respectable and intelligent class of his Majesty's Subjects."

This would indicate that English merchants and shippers had come › employ common carriers upon the sea to a large extent during the pening years of the nineteenth century; whereas there is no evidence f the successful operation of the common carrier in maritime commerce ı the United States prior to 1816, when the Black Ball Line began to ın packet ships between New York and Liverpool. Had it not been ›r the interruption in the commerce of the United States with Europe ıused by the embargo and non-intercourse acts of 1807 and 1809 and ıe war of 1812, it is probable that the period of transition from the 'a of the merchant carrier to that of the common carrier on the sea ould have begun several years earlier in America.

At least two attempts were made before the end of the eighteenth :ntury, one by Englishmen, the other by Frenchmen, to establish line :rvices between Europe and America.[1] The Falmouth Line, with packet ships, began running between Falmouth and New York before ıe Revolution, but the service was necessarily infrequent during the ar and seems not to have become of much importance, even after 783. When the treaty of 1783 made the United States politically ıdependent of Great Britain and it was supposed that Americans ould henceforth trade less with England and more with France, who ıd befriended them in their war for independence, a French company :gan running packet ships between l'Orient and New York. Monthly

[1] J. R. Smith, *The Ocean Carrier*, 99.

sailings were announced and passenger, mail, and freight traffic was solicited. It was soon discovered, however, that the trade of the United States was, for the most part, to remain with England. The French line to America soon disappeared. It had less vitality and shorter life than the Falmouth Line; neither succeeded in establishing itself as a common carrier in the trade of America.

The appearance of the common carrier in the maritime commerce of the United States after the war of 1812 meant neither the immediate nor the rapid withdrawal of the merchant carrier. Indeed, there are survivals of the old-time merchant carrier even to-day, although the international trade of the world is now served both by scores of great lines each managing a large fleet of 5,000 to 20,000-ton steamers, and by thousands of chartered sail and steam vessels which, though operated as single units, approach in size and efficiency the ships composing the well-known ocean lines. The world's commerce, however, is no longer handled solely or mainly by the merchant. He shares his task with the common carrier, both being assisted by the ship-broker, the freight-forwarder, the insurance-underwriter, and the international banker The cooperation of these indispensable co-workers with the merchant and the carrier in the present-day conduct of trade is a part of the history of the organization of commerce in the nineteenth century.

PART TWO

INTERNAL COMMERCE OF THE UNITED STATES

By T. W. VAN METRE

CHAPTER XII.

VOLUME AND GENERAL CHARACTER OF THE INTERNAL COMI OF THE UNITED STATES.

Definition of internal commerce, 193. Internal commerce larger in volume th the foreign trade, 194. Resources and industrial characteristics of different se tions of the United States, 195. The Northeastern States, 195. The Southe States, 197. The Central States, 198. The Rocky Mountain States, 199. T Pacific States, 199. Tonnage of commerce by rail, 1910, 200.

Though in its fullest signification the internal commerce of a c embraces every purchase, sale, and exchange of commodities oc within its boundaries, together with the business of transmittin ligence and of transporting persons and things from place to pla term is here taken as referring to the interchange of commodities the various sections and communities of a country carried o interior lines of transportation—rivers, lakes, canals, highway railroads. In a study of the history of internal commerce, th exchanges among the individuals of single communities, which be included within the scope of the broad definition of interna merce given above, are not of practical significance; and the b of the transmission of intelligence and of the transportation of p and property, though its development is of vast importance building up of internal trade, is of itself a subject for incident sideration. To describe the development of the exchange of pr among the various sections of a country is the primary object o tory of internal trade.

Internal commerce can scarcely be said to have existed in A prior to the Revolutionary era. Practically the entire pop lived on a narrow strip of territory along the Atlantic Ocean, and the only domestic commerce of importance was the coasting Even this trade was engaged largely in the distribution of im goods and in the collection of domestic farm and forest produ exportation, as none of the colonies produced a large surplus commodity for which there was a demand in any of the other co After the close of the Revolution, the rapid settlement of the west of the Appalachian highland and the development of a se diversity of occupation—manufacturing in the New Englan Middle States, grain-raising in the Ohio Valley, and cotton-rai the South—gave rise to a large internal trade.

After this beginning, internal trade had a steady and rapid g The westward migration never ceased until the occupation continent from ocean to ocean was accomplished. The vast of territory with its incalculable wealth of natural resources, it tiful rainfall and wide range of climatic conditions, and its fa

for manufacturing, yielded a constantly increasing store of wealth to the activities of an energetic and industrious population, and at the same time afforded opportunity for an amazing diversification of industry. The high standard of living of the people created a demand for food, clothing, and many comforts and luxuries more varied than that of any other people. Transportation facilities developed with the spreading of the population and the growth of industry, binding together all the widely separated parts of the large territory, permitting an extensive subdivision and specialization of productive effort, and enabling the inhabitants of each section to secure the products of all other sections and in turn to send their surplus to any market in the country. Increasing with constant acceleration, internal commerce outstripped in magnitude all other lines of industry, and to-day is the best index of the wealth and prosperity of the nation.

The internal commerce of the United States has received far less study than its foreign trade, the spectacular development of which has been the theme of much writing and discussion. But large as the volume of foreign commerce has become, it fades into somewhat small proportions when compared to the stupendous volume of internal trade. Each year the United States produces many billions of dollars worth of exchangeable commodities. A small fraction of the output is exported to foreign countries. The remainder, with the exception of a relatively small portion that is consumed by those who produce it, is bought and sold within the United States. Practically all the goods exported abroad also enter the domestic trade of the nation before they become available for exportation. This great stock of products thus exchanged, together with most of the foreign imports that are resold after entering the country, make up the chief materials of domestic trade. Part of this stock is consumed within the immediate vicinity of the place of its production, but a tremendous amount is distributed throughout the country over the railroads, lakes, rivers, and canals. Adhering strictly to the interpretation of the term "internal commerce" previously given, one may consider these commodities as constituting the materials of the internal trade of the country. By far the largest part of the internal commerce is carried on over the railroads. Each year since 1887 the Interstate Commerce Commission has collected statistics showing the volume of railroad traffic. During the fiscal year ending June 30, 1910, the traffic originating on the various railroads of the country amounted to 1,026,491,782 tons. Complete statistics of the volume of traffic carried by water within the United States are not collected. In 1906, however, the Bureau of the Census, after a careful inquiry, estimated that the total volume of the internal trade by water amounted to 107,410,495 tons, divided as follows:

	Tons.
Great Lakes and St. Lawrence River	75,609,649
Mississippi River and its tributaries	27,856,641
All other inland waterways	3,944,655
Total	107,410,945

Allowing for no difference in the volume of traffic in inland waterways between 1906 and 1910, the entire rail and inland water traffic for the latter year amounted to 1,133,902,727 tons.

It is impossible to give an accurate statement of the value of this traffic. Contrary to its practice in regard to foreign trade, the value of which is reported annually with great detail, the Government makes no attempt to ascertain the value of the larger and more important domestic trade. It is probable that the value of the internal traffic for 1910 amounted to something more than $30,000,000,000, a sum ten times the value of the foreign trade of the United States, and almost as large as the value of the foreign trade of the entire world.

Internal commerce, like foreign trade, arises because of the natural and acquired differences in the productive capacities of separate communities so situated that the inhabitants of one community are able to secure needed commodities, for which they have inferior advantages for production, in exchange for articles the production of which is favored by the conditions in their particular locality. With a growing ease of interchange among neighboring regions, productive effort tends to a greater specialization, which in turn is reflected in a larger and larger trade. In the United States, where great diversities of climate and resources favor a wide variation of production, this principle of commercial growth has been fully exemplified. Adapted naturally or artificially to certain lines of activity, different sections of the country have become more or less specialized, and this localization of trades and occupations has been the most important of the factors determining the general character of internal trade.

For convenience the United States may be divided into five sections, distinguished from one another on the basis of industries which constitute the primary source of their economic prosperity. Geographically these sections may be designated as the Northeastern States, the Southern States, the Central States, the Rocky Mountain States, and the Pacific States. No one of these sections is economically self-sufficing, but each depends more or less upon all the others for various commodities to support its economic welfare. A review of the principal resources and characteristic industries of each section and a brief description of their most important commercial relations will indicate the chief features of the internal trade of the entire country.

RESOURCES AND INDUSTRIAL CHARACTERISTICS OF DIFFERENT SECTIONS OF THE UNITED STATES.

The Northeastern States include all the States north of North Carolina and east of Ohio and Kentucky. The principal industries of this section are manufacturing and mining. The great manufacturing industries of these States are chiefly accountable, directly and indirectly, for the extensive trade with the other sections. By far the largest part of the raw materials for the many large manufacturing establish-

ments are brought from a distance. The chief sources of iron ore are the mines around the western end of Lake Superior, whence millions of tons are transported each year by lake vessels to ports on Lake Erie to be carried by rail to the furnaces of Pennsylvania and New York; all the cotton and most of the wool used in the textile mills are shipped in from the South and West; and many other industries, too great in number to be given here, in a similar way draw their raw products from the other sections. The finished products of the mills are marketed everywhere throughout the country. Tools, machinery, steel rails, and structural iron from the iron and steel mills, and the fabrics, clothing, carpets, and rugs from the cotton and woolen mills of these States are sold in every State in the Union.

The concentration of population brought about in this section by the growth of manufacturing is also a reason for its large trade with other States. Though agriculture holds a place of importance among the economic interests of the Northeastern States, and dairying, truck-farming, and mixed farming contribute a large supply of food for the inhabitants of the numerous urban centers, they are entirely inadequate to supply the total amount of food required, and a large part of the subsistence of the population is drawn from the States farther west.

Considerably more than one-half the tonnage of the coal mined in the United States is secured in this section and the distribution of a large part of the output among these States forms an important part of their commerce. Moreover, large quantities of coal are shipped west and south. Both anthracite and bituminous coal are shipped by rail or by rail and lake to all Central States east of the Mississippi River, and a large tonnage of soft coal is shipped in barges down the Ohio and Mississippi Rivers. The oil-refineries of this region secure crude petroleum from nearly all the oil-fields of the country and ship its various refined and finished products to many markets among the other sections.

In addition to the large commerce in all the important domestic products of the United States, which are shipped in and out for home consumption, the Northeastern States possess the ports through which is handled the major portion of the foreign trade of the nation. A heavy tonnage of agricultural produce, cereals, cotton, fruit, animals, and provisions, and a large amount of manufactured goods move from the interior to the North Atlantic ports for exportation to European countries and all other parts of the world. Through New York alone one-third of the outbound foreign commerce of the country passes, and Baltimore, Boston, and Philadelphia handle a sixth. The import trade is concentrated to an even greater degree within this section. Three-fourths of the importations into the country come through the four cities just named, New York alone handling six-tenths of the total. The commodities brought in are of a wide variety and of great value, and their distribution constitutes an important part of the internal trade of the eastern seaboard cities.

The Southern States, including all the States lying south of t thirty-seventh parallel of latitude, between the Atlantic Ocean a the western boundary of Texas, have long followed as their chi industry the cultivation of cotton. The importance of cotton-raising this section has greatly influenced the history of the internal trade the United States. The almost exclusive devotion of the South this great staple for a long time compelled the dependence of that secti upon the Northern States for practically all its manufactured neces ties and a large part of its food-supply. At the same time the southe cotton was a necessary factor in the development of the extensive text industries of the North, especially in the New England and Midd States. The rail shipments of cotton to northern mills make up large part of the trade of the Southern States; large quantities of tl valuable commodity are also shipped by rail to every important po of the Pacific and North Atlantic States for exportation; and st larger amounts are concentrated at the south Atlantic and Gulf por for the coastwise and foreign trade.

Within recent years there has been a notable development of cott manufacturing in the Southern States themselves, and their mills a now consuming more cotton each year than the mills of the Nort The expansion of these manufactures has caused a decline in the tra in raw cotton in a few States, but the loss has been more than co pensated for by the added commerce in food and manufactured produc occasioned by the change.

The industrial and commercial life of the South has been furth modified in recent years by the development of its mineral resourc The coal fields of Alabama, Tennessee, Missouri, and Oklahoma co tribute a large amount of fuel for distribution among the States co posing this section, and the iron mines of Alabama and Tennessee n form the basis of large iron and steel industries in those States. T phosphate beds of Tennessee, South Carolina, and Florida supp valuable fertilizing material which enters both foreign and domes trade. The oil-fields of Oklahoma and Texas are among the mo productive in the country.

The lumber production of the Southern States has grown to su an extent that this section now outranks all other lumber-produci regions of the country in the value and quantity of the annual c The yellow-pine belt extending along the Atlantic Ocean and Gulf Mexico from North Carolina to Texas furnishes lumber in large amour for all the Northern States, as well as a large quantity of naval stor and the hardwood forests lying north of this belt have given rise to extensive milling industry, the products of which are widely distribut throughout the North and South.

Though cotton, forest products, and petroleum are the most imp tant commodities shipped from the South to other parts of the count

many other articles add to the commerce between this section and the other States. Tropical fruits from Florida, sugar from Louisiana, rice from the lowlands on both the Atlantic and Gulf coasts, tobacco from North Carolina and Tennessee, live-stock from Texas, and large quantities of fresh vegetables and fruit from several of the States are sold in all parts of the North, and help to pay for the heavy return shipments of food products, manufactures, and general merchandise.

The Central States lie north and west of the two groups just discussed, extending westward to the eastern boundaries of Montana, Wyoming, and Colorado. This group forms a great cereal and live-stock belt, and it is the principal food-producing region of the country. The spring wheat of the Dakotas, Minnesota, and Wisconsin and the winter wheat of the remaining States of this section furnish flour for millions of people in the United States and in foreign countries; and the immense corn crops of the States south of the forty-third parallel of latitude are used to fatten thousands of hogs and cattle which are converted into various food products. Other cereals, such as oats, barley, and rye, potatoes and other vegetables, all kinds of orchard fruits, and large quantities of butter, cheese, poultry, and eggs are also produced in this region for local consumption and shipment to other sections. The collection and distribution of a large part of the agricultural produce of these States and of the States of the Southern and Rocky Mountain groups are accomplished by a number of large cities on the Great Lakes and on the Mississippi, Ohio, and Missouri rivers. The trade of these great primary markets is one of the most important features of the internal commerce of the country, and the traffic moving between this section and the Northeastern States makes up a large proportion of the total internal trade.

Though agriculture is the leading industry of this group of States, manufacturing is of almost equal importance. Practically all the products of the farms must be changed in form before they are ready for sale to the final consumers, and the preparation of raw food products for wholesale and retail markets is a notable feature of the industrial activity of this section. Slaughtering and meat packing, milling, canning and preserving, and the manufacture of butter and cheese are leading industries of this nature. Agricultural development has also led to an extensive manufacture of agricultural implements. Other kinds of manufacturing industries not closely related to agriculture have also been developed, especially in the eastern part of this section, which now rivals the Northeastern States as a manufacturing center. The easy access which Chicago and the surrounding region have to the coal fields of Illinois and Indiana and to the great iron-ore ranges around Lake Superior makes that district an ideal place for the location of iron and steel mills; and Ohio, too, has large industries of this kind. Other mineral resources of petroleum, copper, stone, lead, and zinc are

the basis of manufacturing industries; and abundant forest resou have led to the establishment of many lumber mills and factories for production of all kinds of articles of wood. This section shares v the Northeastern States the business of supplying the South and W with many manufactured commodities.

The Rocky Mountain States—Montana, Idaho, Wyoming, Nev Utah, Colorado, Arizona, and New Mexico—have for their fu mental industry the production of wool and live-stock. Over one- of the sheep of the United States are to be found in these eight Sta The wool from them is practically all used in the textile indust of the Northeastern States. The cattle are shipped both to the l stock markets of the Central States and to the larger cities on Pacific coast.

The mineral resources of these States make up a large part of t wealth. The census of 1910 ranks Colorado sixth and Wyon eleventh among the States according to the value of bituminous produced. Gold and silver are found in greater or less quantitie every State of this group; nearly two-thirds of the total outpu copper of the country is mined and smelted in Montana, Arizona, Utah; and extensive deposits of iron ore are to be found, the m important being in Colorado.

The arid climate of this region will always prevent the developm of agriculture to the extent reached in other sections of the coun but irrigation is now converting into productive farming lar d m large tracts that were once barren. The reclamation of still mor the "Great American Desert" is only a question of time and, as movement continues, the population and wealth of this section grow and its commercial importance increase.

The Pacific States are still primarily agricultural. Like the Ro Mountain States, they secure most of their manufactured goods merchandise from the Central and Northeastern States. Wh barley, live-stock, beet-sugar, fruits, and lumber constitute the b of their industrial and commercial prosperity. A portion of t surplus is shipped by sea across the Pacific Ocean and to lands bordering the Atlantic Ocean, but a still larger part finds way by rail to markets in the States east of them. The fruits California and the lumber and shingles of Washington and Ore form the most valuable part of the traffic moving eastward from section. The market for orchard and vineyard products inclu the entire United States, and the market for timber products is spre ing rapidly eastward as the depletion of the forests of the Central Southern States goes on. The grazing industry and the fisheries of Pacific States are also a source of a valuable eastbound traffic. coal of Washington and the petroleum of California are import articles of trade within this region.

The rapid growth of the foreign trade with the Orient has added greatly to the commercial prosperity of the Pacific Coast. Through its ports are handled raw cotton, manufactures, and food products sent from the States east of the mountains for exportation, and the imports from the transpacific countries entering these ports for shipment to eastern points over the transcontinental railroads are an even larger source of traffic.

TONNAGE OF INTERNAL COMMERCE BY RAIL.

In the volume of statistics published annually by the Interstate Commerce Commission an analysis of the railroad freight traffic is presented which gives, as far as is practicable to do so, the character of the freight transported within the United States and also indicates the territory

TABLE 11.—*Railroad tonnage by groups of commodities, 1910.*

Class of commodity.	United States.		Division I. Territory north of Ohio and Potomac Rivers and east of Illinois and Lake Michigan.		Division II. Territory south of Ohio and Potomac Rivers and east of lower Mississippi River.		Division III. Territory west of Lake Michigan, Indiana, and lower Mississippi River.	
	Tonnage reported as originating on line.	Percentage of aggregate.	Tonnage reported as originating on line.	Percentage of aggregate.	Tonnage reported as originating on line.	Percentage of aggregate.	Tonnage reported as originating on line.	Percentage of aggregate.
Products of—								
Agriculture..	78,736,587	8.13	20,814,209	4.42	9,913,080	6.79	48,009,298	13.67
Animals.....	20,294,144	2.10	7,402,683	1.57	1,083,606	.74	11,807,855	3.36
Mines.......	544,604,373	56.23	291,210,129	61.80	79,201,479	54.24	174,192,765	49.60
Forests......	113,010,825	11.67	23,988,412	5.09	30,561,411	20.93	58,461,002	16.64
Manufactures....	139,678,391	14.42	90,419,841	19.19	16,302,043	11.16	32,956,507	9.38
Merchandise.....	35,718,413	3.69	13,780,911	2.92	5,188,786	3.55	16,748,716	4.77
Miscellaneous....	36,421,276	3.76	23,597,090	5.01	3,778,254	2.59	9,045,932	2.58
Grand total.	968,464,009	100.00	471,213,275	100.00	146,028,569	100.00	351,222,075	100.00

in which the traffic originates. Table 11 shows the results of the analysis of the railroad freight business for the year ending June 30, 1910. A little more than 94 per cent of the total tonnage for the year is included within the classification.

It will be seen from the table that mineral products, chief among which are coal and ore, constitute more than half of the freight tonnage of the railroads, though this traffic takes a much lower rank in value than the other important classes of goods. Manufactures, forest products, and farm products rank next, in the order given, in the amounts of tonnage contributed. The sectional classification of the traffic shows little that has not been indicated in the preceding discussion of the resources and industries of the country. Division I, including the Northeastern States and the eastern half of the Central States, contributes almost half of the total classified traffic, practically two-thirds of the total manufactures, and more than one-half of the

minerals transported. In Division II the products of agriculture seem of less importance than they really are, chiefly because cotton, the most important agricultural product of the section, is relatively light in weight. In Division III the products of the farms—cereals, flour, hay, fruits and vegetables, animals, and the various animal products—constitute the traffic of greatest volume next to minerals.

The traffic on the inland waterways of the United States consists, even to a greater extent than does the railroad traffic, of low-grade, bulky commodities. On the Great Lakes, which form the most important waterway, iron ore and coal make up the largest part of the tonnage; but large quantities of cereals and flour are also transported on these bodies of water, and lumber, manufactured goods, and merchandise are items of considerable importance. Of the traffic on the Mississippi River system, the proportion of low-grade freight is probably higher than the proportion on the Great Lakes. The coal carried on the Ohio River and its tributaries is the most important single item from the standpoint of tonnage.

CHAPTER XIII.

.Y DEVELOPMENT OF THE INTERNAL COMMERCE OF THE UNITED STATES, 1789 TO 1830.

ıcation of settlements and commercial cities, 202. Inland transportation, 203. ıe Mississippi River as an outlet for the trade of the Ohio Valley, 205. Opening of : Mississippi River and the purchase of Louisiana, 206. Growth in population the United States from 1790 to 1810, 208. Internal trade in 1810, 212. The ar of 1812 and the growth of the West, 211. Use of steamboats on the Missippi, 213. Trade of New Orleans in 1818, 214. The panic of 1819 and its ects, 216. The American system, 218. Effect of opening of the New York nals in 1825, 220. Building and aid of canals and turnpikes by the States, 221. ımmary, 222.

he beginning of the national era the internal commerce of the States gave small promise of the tremendous development it undergo during the ensuing century. There was as yet too little .al differentiation of occupation to give rise to a large interstate :n native products, and the proximity of the great part of the tion to the seacoast made it cheaper and more convenient to ın the interstate trade that did exist by means of small sailing- plying along the coast. Practically all the internal trade was d to bringing the surplus agricultural produce of the interior seaport towns, where it was exchanged for imported wares that ıot be produced by the inhabitants of the inland region but which ecessary to their welfare. The domestic commodities collected seaports were nearly all exported to foreign countries.

; usual in a new country, the settlers who had first pushed into erior had founded their new homes close to the rivers, and these l highways had always been and still were the most important of transportation to and from the seacoast. The most impor- 'the rivers flowing into the Atlantic Ocean were the Hudson in 'ork, the Delaware between Pennsylvania and New Jersey, the :hanna in western New York, Pennsylvania, and Maryland, and tomac and James in Maryland and Virginia. Other rivers, now :red unnavigable, were continually used at this period, the Con- ıt, Roanoke, Savannah and other smaller streams being but little portant than the large rivers. The Mississippi River having been to the people of the United States soon after the Revolution, :at western system of inland waterways was of little commercial but the current of the Ohio was being used to bear thousands of nts to their new homes in the West.

he mouths of the larger streams that flowed into the Atlantic › be found the large and wealthy cities, where enterprising men ready laying the foundations of large fortunes in a lucrative and ' growing export trade in the agricultural produce that was

floated down from the farms of the interior. Philadelphia, connected with the sea by the readily navigable Delaware River and Bay, exported large quantities of meat, grain, flour, and lumber, collected from Pennsylvania, New Jersey, and Delaware, and sold to the inhabitants of these States thousands of dollars worth of imported goods. New York received, by the sloops and arks of the Hudson River, the raw produce of the Hudson and Mohawk Valleys; the lumber, pot and pearl ashes, grain, meat, and dairy products coming down the Connecticut River from as far as the Canadian border were often carried through Long Island Sound to New York to be exported abroad. In a similar way, Baltimore was the center for the collection of the products from the lands around the upper part of the Chesapeake Bay and from the extensive territory drained by the Susquehanna, even the farmers in the distant region of western New York utilizing this city as the outlet for the surplus of their crops and the source of their imported necessities. In the South, where the plantation system of farming prevailed, the practice of carrying on foreign commerce from the wharves of the plantations themselves had prevented the development of cities of a considerable size; but the settlement of the higher country for the cultivation of upland cotton indicated that the old methods of trade were soon to become obsolete.

INLAND TRANSPORTATION.

Living close along the ocean, whose numerous excellent harbors and long stretches of sheltered water gave ample facilities for the little intercolonial trade that existed, and where rivers afforded natural means of transportation from the interior to the towns upon the coast, the people of early colonial days had not found it necessary to give much time to the construction of roads. The gradual inland movement of the population and the settling of lands back from the edges of the rivers had finally compelled them, however, to give more attention to the means of land transportation. Rude earth roads were built to replace the old Indian trails through the forests. These roads were unspeakably poor—sloughs of mire during the thaws of winter and spring and thick with dust in the summer; but bad as they were, they carried a large traffic and their use was steadily growing. Dwight[1] told how tinware peddlers from Berlin, Connecticut, made their way in carts and wagons to every section of the country from Maine to Georgia. It was possible to carry freight overland from Boston to Savannah, but the trip consumed 115 days and the cost was enormous. Genet, in 1793, traveled by coach from Charleston to Philadelphia; and Washington, during his administration, traveled by land through every State in the Union.

[1] *Travels in New England and New York* (1797), II, 43-45. Quoted by Callender, *Economic History of the U. S.*, 302.

ree great roads had been built into the western country: one up
Mohawk Valley into western New York, and two across the
heny Mountains—the Forbes or Pennsylvania road from Phila-
ia to Pittsburgh, and the Wilderness road, over which the early
rs of Kentucky had threaded their way up the Shenandoah
y and through Cumberland Gap to the southern banks of the
River.[1] The Mohawk Valley road carried great quantities of
to the city of Albany; the Pennsylvania road was traveled by
ands of emigrants starting for the lands on the Ohio, and by long
of pack-horses and wagons bringing such of the produce of
rn Pennsylvania as could afford the cost of carriage to the
ets of Philadelphia. In the South, the roads were poorer than in
North. Tobacco and cotton were much lighter than the grain
ther products of the northern farms and could be transported with
er ease. Much of the tobacco was hauled over "rolling roads,"
being attached to the ends of a hogshead and a horse used to
over a rough, narrow track to some wharf on an inlet or river.

and towns were beginning to grow up at the focussing points of
ountry roads, and the owners of the general stores at such places,
sugar, tea, coffee, molasses, cloth, hardware, metals, and earthen-
were freely bartered for grain, meat, poultry, cheese, butter,
es, fruits, vegetables, and rude articles of domestic manufacture,
ed large profits out of their position as middlemen between the
cing farmer and the importing and exporting merchant at the
st seaport. Especially if such inland towns were situated on the
able streams they assumed an appearance of affluence and pros-
r. The citizens of Albany, which was a market for furs and skins
Canada, for lumber from the mountains, and for the grain from
rich and splendid valley already famous for its wheat fields and
fields and rye,"[2] had long been boasting about the commercial
e in store for them. Springfield, Massachusetts, was a thriving
et-town on the Connecticut River. Lancaster, Pennsylvania,
the largest inland town not situated on a waterway, and the
ay between it and Philadelphia probably carried more traffic
any other road in the country. This highway, by 1792, had been
rted into a turnpike, the first in the United States. Winchester,
ia, had several grist mills grinding up the wheat of the surround-
rms, and teams were "constantly employed in the transportation
ır to Alexandria,"[3] 80 miles away, at a cost of carriage of $1.25 a
.

transportation facilities of the time, however, were entirely
quate to the needs of the country, and the lack of better means

[1]For map of roads in 1787 see Avery, *Hist. of the U. S. and its People*, VI, 410.
[2]McMaster, *History of the People of the U. S.*, I, 58.
[3]Coxe, *View of the United States*, 314.

for getting products to market was a serious impediment to internal development. Tench Coxe, writing in 1792, graphically pictured the plight of many of the people when he said:

"To a nation inhabiting a great continent not yet traversed by artificial roads and canals, the rivers of which above their natural navigation have been hitherto very little improved, many of whose people are at this moment closely settled upon lands, which actually sink from one-fifth to one-half of the value of their crops in the mere charges of transporting them to the seaport towns, and others of whose inhabitants cannot at present send their produce to a seaport for its *whole* value, *a thorough sense of the truth of the position* is a matter of *unequalled* magnitude and importance."[1]

Especially was the communication between the Ohio Valley and the outside world difficult and expensive. Washington, recognizing the desirability of means of cheap transportation across the mountains, had, in 1785, succeeded in securing the meeting of a commercial convention to settle problems of river navigation preliminary to the construction of a canal between tributaries of the Potomac and Ohio Rivers. The negotiations of this convention, however, had been diverted to a larger and more important matter than that for which it was originally called, and the question of a canal between the eastern and western country was temporarily forgotten. Agitation for such a canal had been renewed during 1789 and 1790, but nothing was accomplished in this direction until long after the war of 1812.

The natural outlet for the surplus of the Ohio Valley was the Mississippi River. During the Revolutionary War the Spanish Government had given the people of the United States the right of free navigation of the river and a brisk trade had sprung up between the western settlements and New Orleans; but in 1784 Spain had suddenly withdrawn the right of free navigation and had imposed exorbitant tolls and duties on all vessels descending from the United States. The people of the West, enraged at being deprived of what they considered to be their natural right, protested furiously at the action of the Spanish government and appealed to Congress for protection. Their appeals were unavailing; Congress not only failed to take steps to open the river again, but in 1786, under the domination of the commercial interests of the East, was on the point of bartering away, for a period of twenty-five years, all claims to a right to navigate the Mississippi, in return for Spanish concessions in regard to the Florida boundary. Fortunately, this deal was never made, but the river remained closed in spite of the protests and threats of the western farmers. The only market left to them was in the cities of the eastern coast. Peltries, ginseng, and whisky were almost the only products of the West that would pay their cost of transportation overland to Philadelphia, and the proceeds derived from the sale of these were sufficient only to purchase a few

[1] Coxe, *View of the United States*, 384.

things of first necessity, such as salt, gunpowder, and some indispensable articles of iron. When the new government placed the excise tax on whisky, which was practically the only form in which the farmers of western Pennsylvania could profitably take their grain to eastern markets, a storm of rebellion arose in Fayette, Washington, Westmoreland, and Allegheny counties that indicated how precarious their situation really was and how slender were the bonds that united them to the rest of the country. The prices of the agricultural products of the West were absurdly low, a cow and a calf being given in exchange for a bushel of salt.[1]

Shut off as they were from commercial intercourse with the rest of the country, the inhabitants of the inland communities were forced to rely upon their own efforts for the production of nearly everything that they used. In the interior counties of all the Southern States the household manufactures consumed were much greater in amount than those imported. Out of 130 families in Pittsburgh in 1790, there were 37 "manufacturers."[2] Clothing, hats, and shoes were made in nearly all homes, iron furnaces were opened in the vicinity, and in a few years nails, wire, guns, and agricultural implements were being manufactured in western Pennsylvania. In 1796 Brownsville had 24 grist, saw, oil, and fulling mills, as well as one mill for the manufacture of paper, and each year 100 boats of 20 tons each were constructed for the emigrants to Kentucky.[3] By reducing their raw materials to a manufactured state, the people were able to avoid the importation of many wares, and in face of heavy transportation charges to the eastern markets could export some of their surplus. After the suppression of the whisky rebellion, many Pennsylvania farmers turned their attention to raising cattle and hogs, which could furnish their own transportation to market and thus afford a way of disposing of otherwise useless grain.

OPENING OF THE MISSISSIPPI AND THE PURCHASE OF LOUISIANA.

The closing of the Mississippi, however, had been a deadly blow at the prosperity of the western country. The bitter resentment that the people had felt against the old Congress, which had allowed them to be deprived of the right to unhampered navigation of the river, was readily transferred to the new government. This resentment grew still deeper when a temporary opening of the river, brought about in 1789 by the treasonable negotiations of James Wilkinson with the Spanish authorities, demonstrated what splendid opportunities for rich profits really existed in free trade with New Orleans. The trade in 1789 was of but short duration. Almost immediately the people of the United States were forbidden to sell goods in New Orleans and the vexatious regulations and heavy tolls were again imposed upon vessels

[1] Roosevelt, *Winning of the West*, I, 116, 122.
[2] Bishop, *History of American Manufactures*, I, 568. [3] *Ibid.*, II, 67.

passing to the Gulf. Some men in Pittsburgh and Marietta built sea-going vessels, loaded them with pork, flour, and grain, and, submitting to the exactions and duties imposed in Louisiana, made the voyage to St. Thomas and disposed of their cargoes, after which they brought the vessels to Philadelphia, sold them, and returned overland to Pittsburgh. Such enterprises could be indulged in but seldom, however, and even then could be shared by but a few persons. The people angrily demanded of Congress whether it intended to abandon or protect the West, a half-organized movement was put on foot to compel the Spaniards to open the river, while the irksomeness of the situation drove many to talk openly of secession from the United States and union with the Spanish province. Spurred to action by the insistent clamor of the Western people and fearful of the results which might occur if their demands were neglected, the National Government at length made a determined effort in their behalf, and, in October 1795, secured a treaty with Spain opening the river to navigation. The "right of deposit" was given at New Orleans for a period of three years, with the stipulation that, if not continued there, an "equivalent establishment" would be assigned on another part of the banks of the Mississippi.

The successful conclusion of the negotiations was hailed with great rejoicing in Tennessee, Kentucky, Pennsylvania, and Ohio. Fleets of flat-boats and keel-boats loaded with tobacco, pork, flour, grain, whisky, and brandy began to move down the river. After disposing of both cargo and boat at New Orleans, the owner would sail for Philadelphia or Baltimore, there lay in a supply of calicoes and other manufactured goods, and finish the journey home by wagon or on horseback, arriving six months after his departure. Very seldom did any one attempt to urge a craft up-stream against the powerful current of the Mississippi. In the earlier days, when the northern part of the Mississippi territory was held by the Indians, the journey by land from New Orleans to the Ohio was rarely made, but later this method of reaching home became popular with the flat-boat men, the route across Lake Pontchartrain and through Nashville being generally used. The hazard and exposure connected with the trip down the river and the wearisome journey home would seem to have been sufficient to prevent the New Orleans trade from attaining great dimensions, but the hardy pioneers of the West were not to be daunted by the hardships involved in the undertaking. The river trade grew rapidly, and in 1799 goods worth more than $1,000,000 were received at the Louisiana port from the country up the Mississippi.[1] Now that the western farmers had a

[1]Although New Orleans was on Spanish territory, but a small part of this commerce was strictly "foreign," because of the existence of the "right of deposit." The trade down the river was analogous to the trade of inland districts of the Atlantic coast with the seaport cities, New Orleans bearing the same relation to Kentucky and Tennessee that New York did to the valley of the Hudson.

market for their heavy agricultural products, the cost of transporting to which did not exceed the value of the commodities, they secured to some extent that which before they had scarcely possessed at all—a purchasing power. This enabled them to satisfy to a certain degree their desire for the lighter manufactured articles of cloth and leather which, notwithstanding the distance and the inferior roads, could be carried to them in wagons from the eastern cities. The rising prosperity in the West stimulated business in the East; nearly all the money received by the flat-boat men at their southern market found its way into the pockets of the merchants of Baltimore and Philadelphia. Indeed, there was an incessant complaint in the West because the farming sections across the mountains were constantly drained of specie by those two cities.

Meanwhile, the eastern section of the United States began to develop strongly those conditions indispensable to the rise of a true domestic commerce—the exclusive devotion of different parts of the country to particular lines of industry and the mutual dependence upon one another for the commodities the production of which is abandoned. The invention of the cotton gin decided the future of the South. South Carolina and Georgia began at once to depend upon the neighboring States for the provisions formerly raised at home. Under the fostering care of the protective policy adopted by the new government, the manufacturing industries of the Northern States, which had received a start after the outbreak of the Revolution, increased in size and variety. This sharp differentiation of interests was immediately reflected in the growing coasting trade, the tonnage employed in which increased from 103,775 tons in 1790 to 272,492 tons in 1800. Transportation by land, however, was far too expensive to compete for long-distance commerce, and very little of the trade among the Atlantic States was conducted over internal routes of communication.

Between 1790 and 1800 the United States enjoyed, because of the European wars, a considerable commercial prosperity. Business conditions in the East being good, emigration to the West had been checked, and, except in the States of Kentucky and Tennessee, which absorbed more than three-fourths of the 150,000 emigrants of the period, the population west of the Alleghenies had showed but small absolute increase. In the following decade, during which the foreign trade received several severe setbacks, the emigration to the West set in very strongly. The population during the twenty years increased as shown in table 12.[1]

The number of people west of the Appalachian Mountains tripled in ten years, and by 1810 was 1,078,315, exclusive of several thousand in western Pennsylvania and Virginia. The movement toward the newly

[1]Twelfth Census of U. S., 1900. *Population*, pt. i, p. xxii.

opened lands in Mississippi and Louisiana was well under way, though it did not begin to take on large proportions until ten years later.

The trade down the Mississippi had continued to grow. In 1802 the shipments from American territory down the river amounted to $2,634,564, of which $1,182,800 came from Kentucky and $700,000 from Pennsylvania and Ohio.[1] In October of that year, the Spanish Intendant at New Orleans, acting upon his own initiative and responsibility, suddenly withdrew the right of deposit at the city, granted to the United States in 1795, and, contrary to the provisions of the treaty, he refused to assign an equivalent establishment at any other place on the banks of the river. The Western people were enraged, and it was necessary to send troops to Kentucky to prevent an armed expedition against the Spanish province. Cries of "No protection, no allegiance" were again poured into the ears of the Washington officials.

TABLE 12.—*Population of the Western States and Territories, 1790, 1800, 1810.*

State.	1790	1800	1810
Kentucky	73,677	220,955	406,511
Tennessee	35,691	105,602	261,727
Ohio	......	45,365	230,760
Indiana	......	5,641	24,520
Illinois	......	......	12,282
Mississippi	......	8,850	40,352
Louisiana (Missouri)	......	......	20,845
Territory of Orleans (Louisiana)	......	......	76,556
Michigan	......	......	4,762

Fortunately, the Spanish Government disavowed the action of the Intendant, and, in April 1803, the river commerce was restored to its former basis. Desirous of avoiding such difficulties in the future, Jefferson pushed negotiations already begun with Napoleon (to whom Spain had secretly ceded her claims to Louisiana) for the purchase of New Orleans and the territory through which the river flowed from the possessions of the United States to the Gulf. The negotiations terminated in October 1803, with a wholly unexpected and surprising result—the purchase of the entire Louisiana province. In December, the United States took possession of the newly acquired territory. Not only was the undisputed control of the Mississippi secured forever, but the area of the Republic was doubled. The peaceful continuance and growth of the existing river trade were assured to the inhabitants of the West, and the basis was laid for a future internal commerce which was far to outstrip their most sanguine expectations.

The receipts at New Orleans in the years immediately following the Louisiana purchase, though not exhibiting the increase that was expected, rose to $5,370,555 in 1807. This included sugar, cotton, and

[1] *Report on Internal Commerce of U. S.*, 1887, p. 183.

nolasses of Louisiana, which commodities made up a third of the entire ımount. Shipments up the river were very small, employing less than o per cent of the tonnage used in the traffic downstream. It took 30 nen over three months to work a loaded flat-boat from New Orleans to he mouth of the Ohio, and the freight rates were greater than those n traffic carried by wagons from Philadelphia to Pittsburgh in twenty lays. Until after 1817, the entire commerce from New Orleans to he upper country was carried on by means of 20 barges averaging one rip each a year. The money for which the products of the western armers was exchanged at New Orleans was invariably spent for nanufactured and imported wares from the eastern cities. The large Conestoga freighters, drawn by 6 to 10 horses and capable of carrying and 3 tons, made regular trips from Philadelphia to Pittsburgh, ringing loads of hats, boots, powder, lead, and clothing, which were listributed from the "Gateway of the West" among the towns and illages down the river. Baltimore, too, had a large western trade, nd New York, notwithstanding its greater distance away, was beginning to engage in it, and by a sharp cutting of freight rates was soon ble to secure a considerable share of the traffic.

INTERNAL TRADE IN 1810.

The internal commerce of the country in 1810, as in 1790, was still andicapped by the fearfully high costs of transportation. An era of urnpike building that was to last for forty years began in 1790, and he problem of land carriage for those regions close to the seacoast or the avigable streams of the East had been almost eliminated; but turnikes were unable to afford cheap carriage for long distances. The harges to send goods by wagon were enormous.

> "To haul a ton from Philadelphia to Pittsburgh, an all-land route, cost 125. . . . To move a bushel of salt 300 miles over any road cost $2.50. . . Taking the country through, it may be said that to transport goods, rares, or merchandise cost $10 per ton per 100 miles. Articles which could ot stand these rates were shut from the market and among these were grain nd flour, which could not bear transportation more than 150 miles. The auses of these rates were the terrible state of the roads and the high rate of olls."[1]

The Western States found the outlet for their produce in one direcion and the source of their supplies in another, the difficulties of transortation giving to the commerce of the Ohio Valley a peculiar tringular character, which was retained for a half century. The States ordering along Canada turned to Montreal and Quebec for a market, he freight rates from Buffalo to Montreal being $30 per ton, and from Montreal to Buffalo $60 to $75 a ton, while the rates from Buffalo to New York were $100 per ton.[2] Western New York became entirely

[1]McMaster, *History of the People of the U. S.*, III, pp. 463-464. For statement of cost of transortation during this period consult documents appended to Gallatin's "Report on Roads and anals." *American State Papers, Miscellaneous*, I, 724.

[2]Poor, "Railroads and Canals in the United States," in Andrews, *Report on Colonial and Lake rade*, 278; see also Callender, *Economic History of the U. S.*, 326.

separated commercially from the eastern part of the State, and not only were the various sections of the country developing local and sectional economic interests, but local political interests as well. "The economic question of the hour was plainly how to counteract this tendency by a system of interstate commerce which should unite them with a firm bond of self-interest."[1] Gallatin's report on internal improvements in 1808 reflected the plans and ambitions that were in the minds of the commercial and political leaders of the country, but unfortunately the foreign controversies in which the United States became involved at that time prevented any attempt to carry out his proposals.

The only products of the farmer, the marketing of which was not greatly interfered with by the excessive costs of land transportation, were his live-stock. The whisky rebellion had given a great impetus to the business of stock-raising in western Pennsylvania, and the industry had readily taken root in all parts of the Ohio Valley. The abundance of mast in the large forests and later the cheapness of corn made hog-raising in particular a profitable occupation in Ohio, Kentucky, and Indiana. Until after 1812 many of the cattle and hogs of the West were driven to Baltimore and Philadelphia to be slaughtered for the domestic and foreign provision trade and to supply hides for the manufacture of leather goods in New England. It was estimated that over 100,000 hogs were driven east annually from Kentucky alone; herds of several hundred cattle and droves of 4,000 to 5,000 hogs were no uncommon sight to travelers on the highways leading across the mountains to the eastern markets.[2]

The manufactures of the United States, which had grown but slowly since 1790, were tremendously stimulated by conditions resulting from the interruption of foreign trade in 1808 and 1809. Not only were importations reduced, but a great deal of capital was transferred from commercial operations to manufacturing. Scores of people in Massachusetts, Rhode Island, and other States turned from the sea to secure their livelihood in the new establishments erected for the manufacture of cotton and woolen goods, iron, wood, glass, hardware, leather, and pottery. In 1810 the census marshals returned $127,694,602 as the total value of the manufactures of the United States,[3] one-half of which amount was credited to the three States of Pennsylvania, New York, and Massachusetts. Tench Coxe estimated the value of all manufactures of the United States, including those of the households, at $198,000,000. Sixty-two cotton factories, turning 80,000 spindles, contributed $4,000,000 of this amount, and the woolen factories were turning out a considerable product. The New England States were taking the lead in the new textile industries; their purchases of raw

[1] McMaster, *History of the People of the U. S.*, III, 465.
[2] Turner, *Rise of the New West*, 101.
[3] Bishop, *History of American Manufactures*, II, 163.

ı from the South grew steadily, while their demand for wool ed the owners of the rocky hillside farms of Vermont, New Hamp- and Massachusetts to turn their attention to sheep-raising. ıylvania led in the production of iron, having 44 blast furnaces, ·ges, 18 rolling and slitting mills, and 175 nail factories, making by machinery.[1] Pittsburgh manufactured cast-iron kettles for ıgar plantations of Louisiana and produced annually 200 tons of part of which were shipped to New York by way of New Orleans.

THE WAR OF 1812 AND THE GROWTH OF THE WEST.

: foreign complications in which the United States was involved r culminated in the war of 1812. The depression of foreign trade ıe blockade of most of the Atlantic coast compelled the people of nited States to depend upon their own resources to satisfy their , and internal commerce was for the time greatly stimulated. oasting fleet was forced to remain in the harbors, and for the first ı large part of the commerce between the North and the South ırried on by land. Never was the need for better means of inland ›ortation brought home more forcibly to the people. Domestic odities commanded much higher rates than foreign goods of the kind during times of peace. The manufacturers of the North- possessing a monopoly of the market and producing wares that be carried most cheaply, enjoyed a period of great prosperity. utput of the cotton mills alone reached $9,000,000 in 1815. New nd not being subjected to the blockade, practically all of the ı trade of the country was carried on through the port of Boston, merchants during the early part of the war shared with the ʼacturers the high profits arising from war prices and a monopo- rade. When the embargo of December 1813 deprived Massachu- ılso of its foreign trade, the mercantile interests added their ts against the war to those of the shipping interests, but there ttle complaint from the manufacturers.

ı result of the centralization of trade around the importers and ʼacturers of New England, all the rest of the country was com- to pay tribute to Boston, whose banks "cornered" nearly the supply of available specie. In 1814 there were $7,000,000 in lying in the Boston banks, while the States south and west of England were practically stripped of metallic money. To make the deficiency in a circulating medium, the banks resorted to the ent of issuing large sums of paper money. During 1814 the ›rable turn in the fortunes of war and a sharp attack on all paper by the disgruntled Boston banking interests caused a great iation in this credit currency and the nation suffered its first financial panic; but the return of peace (early in 1815) and the

oxe, *Statement of the Arts and Manufactures of the U. S. of A. for 1810*, pp. 49–51.

revival of foreign commerce soon restored confidence and the next three years brought an era of prosperity to nearly everyone, except to the owners of the textile mills and iron manufactories along the eastern coast, most of which were compelled to shut down on account of a deluge of importations from England. The attempt made to relieve the distressed manufacturers by the passage of the tariff of 1816 was apparently ineffectual, but their plight was for a time lost sight of in the return of "good times" to the rest of the people.

After the war, emigration to the West set in with a renewed vigor. By 1820, Ohio, with a population of 581,434, had outstripped both Kentucky and Tennessee, with 564,317 and 422,813 respectively. The people of Indiana numbered 147,178, of Illinois 55,211. In the South, Louisiana attained a population of 153,407, Alabama 127,901, Mississippi 75,448, and Missouri (whose people were asking admission into the Union) 66,586. The fertile stretches of virgin soil in the Ohio Valley contributed an enormous product of grain, tobacco, fruit, and hemp which continued to find an outlet down the Mississippi, and the farmers increased their purchases of manufactured goods which flowed into Pittsburgh from the East. Shipments to New Orleans were stopped temporarily in 1813–14 by the stress of the war and the attack on New Orleans by the British army, but after peace was declared shipments became larger than ever. The receipts at New Orleans in 1816 amounted to $9,749,253,[1] fully 60 per cent of which came from the district north of Mississippi.

In 1811 Fulton's great invention was introduced on the western waters, and in 1817 the first steamboat voyage was made up the river from New Orleans to Louisville. The effect of this new engine of commerce on the Mississippi trade was almost magical. The steamboat afforded a more efficient means of transporting products to the southern markets; it enabled the flat-boat men to get home safely and quickly after disposing of their cargoes and boats, and it made possible the movement of freight up the river. The shipments up the Mississippi, however, never attained more than one-half the volume of the trade downstream, notwithstanding the ability of the steamboat to stem the current of the water, and, with the exception of such bulky articles as sugar and coffee and occasionally some heavy machinery, very few commodities were sent as far north as the Ohio Valley, most of the northbound traffic being destined for the planters of Louisiana and Mississippi, who drew their stores from New Orleans. The value of the steamboat was reflected chiefly in the large increase of the traffic downstream. In 1818–19, the first year after the steamboat became an assured success, the receipts at New Orleans rose to 136,300 tons, valued at $16,771,711, and the volume of exports of domestic products from New Orleans was greater than that from any other city in the

[1] *Report on Internal Commerce of United States, 1887*, p. 199.

country. Table 13, showing the kinds and quantities of various articles received at New Orleans in 1818, gives an idea of the importance of the city as a market for the produce of the Western States.[1]

The advent of the steamboat and the increase of population and capital in the West made it unnecessary for the farmers to act as their own merchants and transporting agents. The flat-boats gradually gave way to steamboats, which by 1825 were carrying more than one-half of the river traffic. The river cities of the Ohio Valley became the markets for the produce of the surrounding country. The old practice of driving hogs across the mountains to the seacoast was gradually dropped and the hogs were sold at Cincinnati. This city, by 1818, had a population of 10,000 and because of its great pork-packing business

TABLE 13.—*Quantities of commodities received at New Orleans, 1818.*

Article.	Quantity.	Article.	Quantity.	Article.	Quantity.
Beans, bbls.....	3,643	Flour, bbls......	197,620	Rice, bbls......	9,265
Cotton, bales...	65,223	Gin, galls.......	50,250	Skins (bear), No.	3,000
Sugar, hhds.....	21,115	Ginseng, bbls...	1,200	Soap, boxes.....	2,576
Bacon, cwts....	18,620	Hay, tons......	40	Starch, boxes...	125
Pork:		Hides, sides.....	6,200	Tafia, galls.....	42,026
Hhds........	813	Hogs...........	1,200	Tallow, cwts....	206
Bbls.........	22,225	Lard:		Tar, bbls.......	837
Bark, cords.....	4,000	Bbls.........	412	Tobacco:	
Beef, bbls......	5,142	Cwts.........	6,738	Hhds........	8,642
Beer, bbls......	306	Molasses, galls..	1,126,500	Carrots......	1,600
Butter, kegs....	1,825	Oil, bbls........	4,200	Manufactured, boxes......	154
Candles, boxes..	2,150	Onions, bbls....	4,220	Wax (bees), cwts.	320
Cider, bbls.....	520	Paper, reams....	426	Wheat, bush....	95,650
Corn, bush.....	145,200	Peltries, pkgs...	3,550	Whisky, galls....	256,610
Cordage, cwts...	4,350	Pitch, bbls.....	3,200		

was known everywhere as the "Porkopolis" of the United States. Louisville was the center of the tobacco trade. St. Louis, the commercial capital of the vast territory across the river, had a population of 5,000 in 1820, and the large quantities of peltry and lead coming from the trans-Mississippi region indicated that the subjugation of the new West was well under way. At every city along the river there was a shipyard, and steamboats were being constructed in increasing numbers at Pittsburgh, Cincinnati, and Louisville. In 1817 an $80,000 manufactory of steam-engines was established at Cincinnati, which the first year turned out products to the market value of $130,000.[2] Pittsburgh, with a population of more than 7,000, was one of the foremost iron-producing centers of the country.

But even more important to the commercial prosperity of the West than the introduction of the steamboat was the transformation being effected in the new Southern States. Cotton culture had been exceedingly profitable in Georgia and South Carolina, and when it was found

[1] *Report on Internal Commerce of United States, 1887,* p. 192.
[2] Bishop, *History of American Manufactures,* II, 240.

that the rich bottom-lands of Alabama, Mississippi, and Louisiana produced an even better grade of cotton than the upland districts of South Carolina, there was a rush of settlers to the river valleys of the new region. In 1812 the sales of public lands in the Mississippi territory amounted to 144,872 acres, the largest amount sold in a single year up to that time. The sales were 490,873 acres in 1816 and 617,090 acres in 1817.[1] In 1811 fifteen-sixteenths of the cotton produced in the United States was grown in Virginia, North Carolina, South Carolina, and Georgia; in 1820 one-third of the total crop of 600,000 bales was raised in Alabama, Louisiana, Mississippi, and Tennessee.[2] In the western part of the cotton belt, as in the eastern part, the planters devoted their capital and labor almost exclusively to the production of cotton, relying on the region north of them for provisions and live-stock. The market for the grain, pork, flour, and other food products of the Ohio Valley was greatly enlarged, and moreover it was a "home" market. A smaller and smaller proportion of the shipments of provisions down the Mississippi reached New Orleans, the flat-boat men finding it easy to dispose of their cargoes at the wharves of plantations which lined the river for miles above the city. Flat-boat stores peddled clothing, boots and shoes, household furniture, hardware, and all kinds of agricultural implements from village to village and plantation to plantation. Great droves of horses and mules were driven into the Southern States in response to the demand for draught animals to use in cotton culture, and the planters bought from the North large quantities of hay and corn to feed their live-stock, just as they bought the food for themselves and their slaves.

As the western farmers enlarged the volume of their sales to the southern planters, they increased the number of their purchases from the eastern merchants. The rise in the value of shipments of agricultural produce down the Mississippi River was immediately reflected by a corresponding rise in the value of receipts of manufactured goods and merchandise coming to the West on the Pennsylvania, New York, and Maryland turnpikes. A large part of the foreign importations of the United States, which in 1816 reached the unprecedented sum of $155,000,000, was sold in the West. Attracted by the cheapness of the goods offered for sale and full of confidence in their ability to meet all debts with the proceeds of the lucrative southern trade, the people indulged in extravagant over-trading. Purchases far exceeded sales and the specie coming from the South was drained away as fast as it was received; but dozens of new banks furnished a sufficient supply of currency by copious issues of paper money, and the career of extravagant buying proceeded. The internal trade of the country never had been so prosperous. Birkbeck reported that 12,000 wagons came to Pittsburgh from Baltimore and Philadelphia in 1817, bringing goods on

---

[1] Seybert, *Statistical Annals*, 364. [2] Hammond, *The Cotton Industry*, pt. i, 247.

'hich the freight charges alone were £300,000.[1] The delay of the peo-le of Pennsylvania in providing for the improvement of roads to the Vest resulted in a loss by Philadelphia of a large part of the Pittsburgh ·ade. Freight rates between the two cities were forced down to $9.50 hundredweight in 1817 and to $6.50 in 1818, but even then the rates ·om New York to Pittsburgh were less by $1.50.[2] When the new Jational Road was opened from Cumberland to Wheeling in 1818, altimore deprived Philadelphia of still more of the western trade, and Vheeling soon rivaled Pittsburgh as the entrepot of the Ohio Valley.

The people of western New York, still handicapped more severely y the difficulties of transportation than the people farther south, did ot enjoy the same degree of prosperity. As long as there was no inland 'aterway to the Hudson River, the farm and forest products of the ienesee Valley were practically unmarketable. The clamor for a anal between the eastern and western sections of the State redoubled 'hen the war of 1812 interrupted the small commerce with Montreal, nd appeals were addressed to Congress to assist in the construction of ich a canal by appropriations of funds from the Federal treasury. 'he appeals were ineffective, and despairing of receiving the expected id from the National Government, the people of New York, under the eadership of De Witt Clinton, decided to construct the waterway at heir own expense. Work on a barge canal from Albany to Buffalo was tarted in 1817, and thus a beginning was made at last on the solution f the problem of transportation between the East and the West.

THE PANIC OF 1819 AND ITS EFFECTS.

The era of good times through which the United States seemed to be assing came to a sudden halt in 1819, when the nation was visited with disastrous money panic. Nearly all the specie in the country had een shipped abroad to settle the large unfavorable balance of trade hat existed during the few years following the return of peace. The dministrators of the government finances had contracted the currency till further by the withdrawal, between 1816 and 1819, of $24,000,000 f the treasury notes issued during the war. To counteract this unfor-unate step and make up for the loss of specie, banking institutions of ie South and West had emitted large amounts of paper money, some f it on credit of a questionable nature. As the tide of internal com-ierce had risen, there had been a general expansion of business. Buoyed up by the protection afforded by the tariff act of 1816 and xpectant of further relief in case of need, many manufacturing inter-sts had sunk more capital in their enterprises. Extensive investments 'ere made in canal and turnpike schemes that anticipated the needs f a generation.

[1] Birkbeck, *Notes on a Journey in America* (3d ed.), 1818, p. 30.
[2] McMaster, *Hist. of the People of the U. S.*, IV, 427. (McMaster refers to contemporary news-apers as sources of information.)

In 1816 the new United States Bank had been chartered for the express purpose of restoring the currency to a normal and satisfactory condition. Instead of attempting to avert the approaching crisis by a gradual replacement of the questionable issues of bank-notes with a currency that would command confidence throughout the country, the officers of the new bank, who had launched it into business without complying with the provisions of its charter, began a vigorous campaign against all other banks of issue, in an endeavor to force them to a specie basis.[1] Considering the amount of specie in the country, such an attempt was bound to end only in failure; but, as a result of the pressure, banks everywhere began to call in their loans and the per capita circulation was reduced from $11.68 in 1817 to $7.74 in 1819. Confidence in all paper money was destroyed. Prices fell at once, manufacturers and business men were unable to meet their obligations, factories shut down, mercantile firms went into bankruptcy, banks closed their doors, mortgages were foreclosed, debtors were thrown into prison, and business all over the country was completely prostrated. The few textile industries that had survived the competition with England after the war were ruined, the iron industries of Pittsburgh and Cincinnati, some of which had not been disturbed by the importations because of the protection afforded by high freight rates and the increased duties of 1818, were compelled to close down on account of the heavy fall in prices and the general depression. To make matters worse, the export price of the great "money crop," cotton, fell from 32 cents in 1818 to 17.5 cents in 1820, because of the discriminatory tariff imposed by England and the increased competition of the Indian cotton-fields. The provision market of the western farmers was greatly injured, and manufacturer, farmer, planter, and merchant all succumbed before the general catastrophe.

The panic gave a sharp check to ruinous extravagance and over-trading; importations declined; investments in visionary schemes of internal improvements ended; prices were readjusted; and legitimate business began to recover. After the depletion of the large surplus stock accumulated during the wars of Great Britain with France and the United States, English merchants and manufacturers restricted their exportations to America and the American manufacturers quickly recuperated from their temporary prostration. All the cotton mills of the United States were soon at work. Every mill in Pawtucket was in full operation by the middle of 1821; during the last six months of that year, Philadelphia started 4,000 new looms; all the factories of Paterson resumed work by 1822; a Boston company erected a mill at Dover, New Hampshire, with a capacity of 20,000 spindles, and by 1823 the demand for American cotton cloth was larger than the manu-

[1] Dewey. "The Second United States Bank," in *Publications National Monetary Commission*, IV, 1911.

facturers were able to meet.[1] The supply of domestic wool was too small to answer the needs of the woolen factories, whose owners were compelled to import wool to keep their looms busy. As the manufacturing industries revived, internal commerce also recovered. In 1820, 3,000 wagons went from Philadelphia to Pittsburgh, carrying $18,000,000 of merchandise; in 1822 one of the five commission houses at Wheeling unloaded 1,081 wagons, each carrying an average freight of 3,000 pounds, the total transportation charges being $90,000.[2] After a heavy slump for two years, the river trade of the West with the South recovered, the receipts at New Orleans in 1821–22 amounting to $15,126,420, and the fact that less than half of it came from the valley of the Ohio indicated that the planters of the lower Mississippi were intercepting a larger and larger percentage of the provisions that formerly went all the way to New Orleans.

THE AMERICAN SYSTEM.

Notwithstanding the revival of manufactures and domestic commerce, the farmers of the grain-belt still found themselves in distressing circumstances. The fertile soil of the great Ohio Valley was yielding a product far in excess of the demand that existed for it, and each year found an increasing amount of unthreshed or unmarketable grain left in the fields and granaries. Foreign nations that profited by exporting their manufactured products to America refused admittance to American grain and flour, and though the grain-producing capacity of the United States had increased six-fold since 1790, the annual exports of flour, beef, pork, and grain were but little more than the average for the five years from 1790 to 1795. Of that which was exported, but very little went to Europe, the chief foreign provision market being, as in colonial days, the islands of the West Indies. The plantations of the South were drawing much of their subsistence from the northern farms, but they were unable to absorb more than a small fraction of the tremendous surplus of meat and flour that was seeking a market. In 1824 corn could be bought at Cincinnati in any quantity for 8 cents a bushel.[3] Wheat yielded the farmer 25 cents a bushel; flour sold as low as $1.25 per barrel. After the advent of low prices, the high costs of transportation fell more heavily upon the farmer than before, a larger proportion of the value of agricultural products being sunk in the expense of carriage to market than of the value of any other commodities.

Agricultural interests sought urgently for relief. Since there was no foreign market for their surplus, they resolved to create a domestic market. If England would not buy the food products of the United

[1] *Niles' Register*, XXI, 1821–22, p. 39; XXII, 1822, p. 67; XXIII, 1822–23, p. 291. Bishop, *History of American Manufactures*, II, 268–89.

[2] Turner, *Rise of the New West*, 100; Birbeck, *Notes on a Journey in America*, 39; Hulbert, *Historic Highways*, X, 57.

[3] *Niles' Register*, XXVII, 1824–25, 123.

States, the United States must refuse to purchase manufactured goods from England, and by the establishment of extensive manufacturing industries at home give rise to a non-agricultural population that would consume the redundant supplies of meat and grain. Upon the growth of domestic manufacturing industries depended the future welfare of agriculture. The farming interest proposed to solve the problem of attracting more capital to manufacturing enterprises by the erection of a system of protective tariffs that would check foreign importations and give encouragement to investments in mills and factories at home. Manufacturing industries already in existence were in no apparent need of more protection from foreign competition; the navigating and shipping interests of Boston and New York and the cotton planters of the South strenuously opposed the protective policy. But the agricultural interests were not to be denied. Henry Clay, speaking for the tariff bill of 1824, said:[1]

"Our agricultural is our greatest interest. . . . We must speedily adopt a genuine American policy. Still cherishing the foreign market, let us also create a home market, to give further scope to the consumption of the produce of American industry. . . . Let us suppose that half a million persons are now employed abroad in fabricating for our consumption those articles of which, by the operation of this bill, a supply is intended to be provided within ourselves. That half a million persons are, in effect, subsisted by us; but their actual means of subsistence are drawn from foreign agriculture. If we could transport them to this country, and incorporate them in the mass of our own population, there would instantly arise a demand for an amount of provisions equal to that which would be requisite for their subsistence throughout the whole year. That demand in the article of flour alone would not be less than the quantity of about 900,000 barrels, besides a proportionate quantity of beef and pork and other articles of subsistence. But 900,000 barrels of flour exceeded the entire quantity exported last year by nearly 150,000 barrels. What activity would not this give, what cheerfulness would it not communicate to our own dispirited farming interest! But if, instead of these 500,000 artisans emigrating from abroad, we give by this bill employment to an equal number of our own citizens now engaged in unprofitable agriculture, or idle from the want of business, the beneficial effect upon the production of our farming labor would be nearly doubled. The quantity would be diminished by the subtraction of the produce from the labor of those who should be diverted from its pursuits to manufacturing industry, and the value of the residue would be enhanced, both by that diminution and the creation of the home market to the extent supposed. . . ."

Under Clay's leadership, the tariff of 1824 was enacted by the votes of the grain-raising and manufacturing districts, and the "American system" was inaugurated. In 1828, in response to an appeal, emanating this time from the woolen interests, who were unable to compete with the English manufactories, and seconded by the agricultural interests, who still found the supply of grain too large for the existing

[1] Speech in House of Representatives, March 30–31, quoted in Taussig, *State Papers and Speeches on the Tariff*, 265, 267, 268; Callender, *Economic History of the U. S.*, 501–503.

ind, still further encouragement and inducement were extended to e manufactures.

hile the country was being agitated by the tariff controversies exceptionally bitter political contests, the New York canals, ning the St. Lawrence River by the valley of Lake Champlain, Lake Erie by the Mohawk Valley and the small lakes of western York, were opened for traffic throughout their entire length ober 1825). Thanks to the ability and persistent endeavors of Witt Clinton, the problem of transportation between the East and West at last was solved by the opening of the Erie Canal. No r single work in the United States has ever exerted a greater ence on the prosperity of internal trade. An end was brought to : had been the bane of internal commerce for a half century—the ssive charges for freight transportation. Freight rates between ny and Buffalo were at once reduced 90 per cent and the day of freighter on the Genesee Road was gone forever.[1] The new canal ight a complete transformation in all the rural districts of western York. Lumber, staves, ashes, grain, and vegetables, hitherto arketable, were now shipped to the markets of the East; farm es doubled and quadrupled; a stream of people poured into the le farming regions; towns and villages sprang up all along the canal. ot less valuable was the new waterway to the district at its eastern iinus. The laboring population of the growing manufacturing is reaped immense benefits from the cheaper and better means ibsistence they could now secure, while the shipments of domestic foreign merchandise to the western region exceeded in value even receipts of raw products at tidewater. New York had achieved omic unity at a single stroke. In 1826, the first year of operation ie entire canal, 302,170 tons were delivered at tidewater in New t, and the tolls paid to the State on the entire canal traffic amounted 577,466. Statistics of the volume and value of shipments were not until after 1835, but it is estimated that the annual value of traffic aged $15,000,000 during the period from 1825 to 1830. At the end iat time tolls collected were more than $1,000,000 annually.

eanwhile, the adoption of the "American system" had been followed rapid growth of manufacturing in the North and West. New land gradually turned from commerce and navigation to manufac-ig, which became second only to agriculture in importance, and gh the transition was not complete in 1828, the evidences of the sformation were sufficient to impel Daniel Webster to espouse the e of protection, and he spoke as vigorously in favor of the second f measure as he had spoken in opposition to the first. By 1830, products of the woolen and cotton mills of the United States, most which were in New England, rose in value to $37,000,000, and

---

or, "Railroads and Canals in the U.S.," in Andrews, *Report on Colonial and Lake Trade*, 234.

the pig-iron product coming chiefly from Pennsylvania and New Yo amounted to 195,000 tons.[1] Philadelphia foundries were using t "stone" coal, floated down the canals built for the purpose along t Lehigh and Schuylkill Rivers. New cities, such as Lowell, Lawren Paterson, and Newark, that owed their prosperity solely to manufa turing, began to rival in wealth and population the older commerc cities of the North Atlantic States. In the West populous commerc and manufacturing towns arose. Pittsburgh maintained its lead in t iron industry, and the population of 12,500 was nearly double what had been ten years before; Cincinnati, with an annual product of man factures of over $2,000,000, was the "Queen City" of the West, and h population had grown to 25,000; Louisville with 10,000 people had mo than doubled in size during the past decade, and had several factor making ropes, cotton and woolen cloth, and bagging of both hemp a cotton.

To provide for the growing internal commerce arising from t diversification of industry and the increase in production, improv means of transportation were essential. There was a universal dema for more roads and canals. The widespread agitation of the time favor of government aid for internal improvements was as intimate related to the "American system" as the appeal for protection of man facturing industries. The National Government had built t National Road, and though it engaged but little in the constru tion of other commercial highways, it gave extensive aid to priva and State enterprises by means of appropriations in the way of lar grants and stock subscriptions. The individual States, unrestrain by any considerations of constitutional authority, embarked in schem of canal and turnpike building which involved them in debts of millio of dollars. Ohio and Indiana, realizing the value of the newly provid outlet to the East, began to construct canals joining the Ohio Riv and Lake Erie. Pennsylvania, awakened to the danger of the to loss of western trade through the State by the fact that the shipme of merchandise to the West were rapidly abandoning the wagon-roa from Baltimore, Philadelphia, and New York in favor of the cheap route by way of the Erie Canal, began, in 1826, an extensive system canals to connect Philadelphia with the Ohio River and the Gre Lakes. Not to be outdone by their rival States, Maryland and Virgi agreed upon the construction of a canal from tidewater in the Potom River to the Ohio River, and on July 4, 1828, President Adams dug t first spadeful of earth to signalize the beginning of the undertaki Some financiers of Baltimore, dubious of the success of an effort build a waterway over the difficult route adopted by the promoters the Chesapeake and Ohio Canal, withdrew their support from th

[1] U. S. Census 1900, *Manufactures*, pt. iii, p. 11; Pitkin, *Statistical View of the Commerce of United States*. 494.

rprise and, putting their confidence in a new and almost untried sportation device, which they believed would prove superior to ls, just as canals had proved superior to turnpikes, they boldly gurated the plan of a railroad from their city across the mountains ie Ohio, and Charles Carroll of Carrollton, placed the stone that memorated the beginning of its construction on the same day that ident Adams officiated at the rival celebration that marked the nning of the canal.

SUMMARY.

ius by 1830 it was certain that the internal commerce of the United es would develop upon a large scale. The territorial division of r already begun could have but one result—a tremendous expan- of domestic trade. That this expansion had already commenced amply evident from the fact that notwithstanding the large growth ealth and population from 1820 to 1830, the imports of the United es had increased but slightly. "The nation was building an empire s own, with sections which took the place of kingdoms."[1] New and, New York, and Pennsylvania were manufacturing the clothing iron utensils for the West and South, and the rising tide of foreign igration was swelling the population of the eastern manufactur- enters. The South was still absorbed in cotton raising, but more half of the crop was now being raised in Alabama, Mississippi, siana, and Tennessee, and the line of plantations was creeping up Arkansas and Red Rivers, while many planters were moving with slaves and cotton gins over into the rich coastal plain of Texas. people of the entire South relied upon the West for their food live-stock; they bought their clothing and machinery from the h Atlantic States, and their exports, which comprised more than thirds of the exports of the entire United States, brought in the e that facilitated the commerce of all sections. The West was it granary. Its new factories were drawing artisans from the East taking laborers from the country to the cities, thus swelling the and for the flour and grain that had recently been seeking in vain market. The volume of shipments of provisions and merchan- down the Mississippi was larger than ever and the manufacturing lation of the East, already too large to be fed by the agricultural uce of New England, New York, and Pennsylvania, was beginning raw its subsistence from the western farms.

eans of cheap transportation, the lack of which had been such an icle to internal development, had been or were being supplied to the requirements of the new conditions. Nearly a thousand nboat arrivals annually at New Orleans, now a city of 50,000, and hundreds of flat-boats floating down the river indicated that the

[1]Turner, *Rise of the New West*, 297.

Mississippi system still carried the largest portion of the nation's internal commerce. Water communication between the Atlantic Ocean and the interior of the United States was established when the Erie Canal connected the Hudson River to the waterways afforded by the series of great inland seas, and settlers were swarming into Michigan and northern Ohio, Indiana, and Illinois, eager for the conquest of the new lands, whose tremendous resources would soon double the volume of the commerce of the nation. There were 1,348 miles of canals in operation in all the United States, and 1,828 miles more in the process of construction. Louisville was rejoicing in the completion of a canal around the falls of the Ohio. Ohio and Indiana were rapidly pushing the work on their canals that were to tap the regions hitherto tributary only to the Mississippi; the construction of the Pennsylvania Canal was being hurried forward to enable Philadelphia to get back the trade diverted by the building of the Erie Canal, and Maryland and Virginia were persistently going on with the building of the waterway westward from Washington City. Meanwhile, 44 miles of railway had been completed and were in operation in 1830. That confidence in the new device was not lacking was shown by the fact that 422 miles were in the process of construction and 697 miles more were already projected.

CHAPTER XIV.

EXPANSION OF INTERNAL COMMERCE, 1830 TO 1860.

Increased area and population of United States, 224. Development of industries, 225. Growth of manufactures, 226. Extension of transportation facilities, 227. Trade of Eastern with Central States via Erie Canal and Great Lakes, 230. The grain trade, 230. Development of the Great Lakes district, 234. Trade on the Pennsylvania Canal system, 235. Trade via the railroads between the East and West, 237. Growth of inland commerce in the Southern States, 240. Internal trade between the North and the South, 241. Active period of the river trade, 241. The commerce of the Mississippi Valley, 242, of New Orleans, 243, of St. Louis, 243, of Cincinnati, 244. Diversion of traffic from the Mississippi River to the eastern railroads, 247. The domestic slave trade, 248. The internal trade of the far West, 248. Summary, 250.

[he years between 1830 and 1860 witnessed a remarkable expansion he United States in area, population, and wealth. At the beginning he period the gross area of the country, which had been increased e since the acquisition of Louisiana, by the purchase of Florida in 9, was 1,792,223 square miles. By the annexation of Texas in 5, a vast tract containing 376,000 square miles was acquired and the tlement of the Oregon dispute during the following year resulted the addition of 285,000 square miles more. The treaties with xico in 1848 and 1853 secured to the possession of the United States immense territory of 573,000 square miles lying between Texas and Pacific Ocean, bringing the total area of the national domain up to 26,000 square miles.

lt the end of each decade of the thirty years the population of the ire country was found to have increased a third or more over what ad been ten years before, the total number of people rising from 866,020 in 1830 to 31,443,321 in 1860. The increase was not form in the different sections. The South Atlantic States showed a centage of increase for the entire period that was less than half the centage of total increase, and the North Atlantic States also failed keep up with the country as a whole. The southern division of the tral States, including Alabama, Mississippi, Louisiana, Texas, ansas, Tennessee, and Kentucky, had an increase of more than 40 cent during each decade between 1830 and 1850, and an increase 4 per cent between 1850 and 1860. In the northern division of the tral States there was a most remarkable growth of population. s section, made up in 1830 of Ohio, Indiana, Illinois, Michigan, and souri, had a population of 1,610,473. Including the partly settled itories of Wisconsin and Iowa, this group had, in 1840, a population ,351,542, an increase of more than 100 per cent. The number of ple in Indiana in 1840 (685,866) was almost exactly double what it been ten years before; the number in Illinois (476,183) was three es as great, the population of Missouri had more than doubled; and t of Michigan (212,267) increased nearly seven-fold. By 1850, the

entire section, including Minnesota, had 5,403,595 people, an increase of 61 per cent in ten years, and by 1860, with Kansas, Nebraska, and Dakota added to the group, the number was 9,076,716, an increase of 68 per cent since 1850. One State, Ohio, had more than 2,000,000, and three others, Indiana, Illinois, and Missouri, each had more than 1,000,000 people. The Far West was very sparsely populated at the time of its acquisition by the United States, but the discovery of gold in California was followed by a rush of settlers, and by 1860 the western section had a population of 618,796, two-thirds being in the State of California.[1]

DEVELOPMENT OF INDUSTRIES.

The opportunities afforded by the fertile lands of the Mississippi River and the Great Lakes to the thousands of settlers flocking to that region enabled agriculture to maintain its prominence among the industries of the country. More than one-half of the total wealth of the nation, which was estimated to be more than $7,000,000,000 in 1850,[2] was made up of the value of farms and farm property,[3] and of a total of $16,000,000,000 in 1860 the farms contributed just a little less than half. Corn was by far the most valuable agricultural product, though not as important an article of trade as wheat. The statistics of production showed a yield in 1840 of 377,000,000 bushels of corn,[4] in 1850 of 592,000,000 bushels, and in 1860 of 839,000,000.[5] Tennessee held first place in the production of corn in 1840, but in 1850 Ohio, Kentucky, Illinois, and Indiana were the foremost producing States, and in 1860, Illinois ranked first with a crop of 115,000,000 bushels, while Ohio, Missouri, and Indiana came next, each with a little more than 71,000,000 bushels.[6] The production of wheat advanced from 84,000,000 bushels in 1840 to 173,000,000 bushels in 1860.[7] In the former year, New York, Ohio, and Pennsylvania were the leading wheat-producing States and again in 1850 these three States led, with Pennsylvania first and New York third, but in 1860 Illinois led in the production of wheat as well as in the production of corn, and Indiana, Wisconsin, and Ohio held in order the next three places.[8] The only other cereal of great importance was oats, the production of which grew from 123,000,000 bushels in 1840 to 172,000,000 bushels in 1860, nearly all of which was produced in the Central and Middle Atlantic States.[9] In 1860, the crop of rye amounted to 21,000,000 bushels.[10] Hay was one of the most important agricultural products, ranking in value next to corn, wheat, and cotton. In the South, cotton continued

[1]For growth of population of the United States, see *U. S. Census 1910*, I, 30–35.
[2]*Statistical Abstract of United States, 1911*, p. 702. [3]*Ibid.*, 732.
[4]DeBow, *Statistical View of the United States* (U. S. Census 1850, Compendium), 174.
[5]U. S Census 1860, *Agriculture*, xlvi. [6]*Ibid.*, xlvii.
[7]DeBow, *Ibid.*, 174; U. S. Census 1860, *Agriculture*, xxix.
[8]DeBow, *Ibid.*, 171; U. S. Census 1860, *Agriculture*, xxix.
[9]DeBow, *Ibid.*, 174; U. S. Census 1860, *Agriculture*, lxiv.
[10]U. S. Census 1860, *Agriculture*, lix.

its sway, the production increasing very rapidly from 732,000 bales of 500 pounds each in 1830 to 1,348,000 bales in 1840, 2,136,000 bales in 1850, and 3,841,000 bales in 1860.[1] Mississippi was the leading cotton State in 1840 and again in 1860, with Alabama, Louisiana, and Georgia the nearest competitors in the latter year. South Carolina held fourth place in 1850, but ten years later was surpassed by both Texas and Arkansas. In addition to being one of the chief cotton-producing States, Louisiana was practically the only sugar-producing State of the Union, its cane plantations yielding an average annual product of more than 300,000,000 pounds of sugar between 1850 and 1860.

The live-stock of the entire country increased in value from $545,180,516 in 1850 to $1,089,329,915 in 1860,[2] half of it belonging to the farmers of the Central States, in which the great corn fields were to be found; 7,000,000 head of horses and mules worked on the farms and plantations; 25,000,000 cattle furnished large quantities of beef, hides, and tallow, as well as over $100,000,000 worth of dairy products each year; 22,000,000 sheep provided wool for the eastern mills, and 33,000,000 swine fattened on the great crops of corn. The value of animals slaughtered for meat in 1850 was $111,000,000, and by 1860 it had risen to $213,000,000.

The exploitation of the mineral resources of the country increased slowly but steadily. From 285,779 tons of coal mined in 1830 the quantity grew to 13,044,680 tons in 1860,[3] nearly two-thirds of which was from the anthracite fields of Pennsylvania. The iron mines of that State turned out 500,000 tons of ore in 1850 and more than 1,000,000 tons in 1860, and in the latter year four other States, Ohio, New York, New Jersey, and Michigan, were each producing annually more than 100,000 tons.[4] Copper production, which amounted to 100 tons in 1845, rose to 7,200 tons by 1860, in which year nearly $2,000,000 worth of domestic copper and copper manufactures were exported abroad.[5] The lead mines, the most important of which were in Wisconsin, Illinois, and Missouri, had an output of 15,000 tons in 1860. The production of oil began in 1859 and during the following year 21,000,000 gallons flowed from the wells of the Pennsylvania field.[6] Gold was found in California in 1849, and for the next ten years an annual average quantity of $55,000,000 was washed from the gravels of the Western States.[7]

Manufacturing industries shared the general prosperity, although the tariff was reduced practically to a revenue basis in 1846. The total value of manufactured products, including also the value of minerals, amounted to $1,019,107,000 in 1850,[8] more than twice

[1] *Statistical Abstract of the United States, 1911*, pp. 734, 138.
[2] U. S. Census 1860, *Agriculture*, cxxvi.
[3] *Ibid.*, cxliii; *Statistical Abstract of United States, 1911*, p. 735.
[4] *Monthly Summary of Commerce and Finance, August 1900*, p. 209.
[5] *Statistical Abstract of United States, 1911*, pp. 735, 737. [6] *Ibid.*, 736. [7] *Ibid.*, 734. [8] *Ibid.*, 738.

the value given by the census figures ten years previously, and in 1860 the amount rose to $1,885,862,000,[1] a sum which exceeded the value of the agricultural production of that year. In 1850, the value of the flour and meal manufactured was over $100,000,000, and boots and shoes, cotton goods, and lumber products were each valued at more than $50,000,000. The manufacturing industries, the value of whose product in 1860 was more than $15,000,000, were, in order of importance: flour and meal, cotton goods, sawed lumber, iron and its manufactures, boots and shoes, men's clothing, leather and skins, woolen goods, miscellaneous machinery, sugar refining, provisions, printing and publishing, carriages, distilled liquors, furniture and cabinet wares, tobacco and snuff, malt liquors, paper, soap and candles, oil, agricultural implements, bread and crackers, hats and caps, tin, copper and sheet-iron wares, marble and stone work.[2] Cotton goods were produced to the amount of $116,000,000 in 1860, and woolen goods, the production of which had increased but little between 1810 and 1840, amounted to $43,000,000 in 1850 and $73,000,000 ten years later. The three leading manufacturing States, in order of importance, were New York, Pennsylvania, and Massachusetts. Ohio held fourth place, being especially prominent in the production of animal products, and agricultural implements and machinery. The sectional localization, which had been apparent in 1830, was much more pronounced in 1860. The manufacture of boots and shoes and cotton and woolen goods was carried on chiefly in New England; Pennsylvania led in coal and iron production, while New York's chief manufacturing interests were in flour, men's clothing, sugar refining, and leather.[3]

EXTENSION OF TRANSPORTATION FACILITIES.

The development of the interior region of the country was accompanied by the construction of transportation facilities to care for the expanding internal trade. The success of the Erie Canal gave a great stimulus to the building of artificial waterways throughout the Northern States both east and west of the Alleghenies, and before 1837 more than $100,000,000 was invested in various canals. The Ohio Canal between Portsmouth and Cleveland was opened in 1832; in 1834, Pennsylvania completed the main-line improvement connecting Philadelphia and Pittsburgh, a remarkable transportation system made up of a railroad for horse or locomotive traction, two stretches of canal, and a system of inclined planes by which canal-boats were drawn across the crest of the mountain range by stationary engines.[4] The Wabash and Erie Canal, extending from Toledo down into Indiana, was finished to Evansville on the Ohio River in 1851, and the Miami Canal, between Cincinnati and Dayton, which had been opened in 1829, was pushed northward to

---

[1] U. S. Census 1860, *Manufactures*, 742. [2] *Ibid.*, 733–742.
[3] See tables for various states in U. S. Census 1860, *Manufactures*, II, 742.
[4] Bishop, *The State Works of Pennsylvania*.

›nnect with the Wabash and Erie in 1845. A New Jersey corporation pened a waterway between the Raritan and Delaware Rivers in 1838, nd by using the ship-canal built between the Delaware River and 'hesapeake Bay in 1829, it was possible for small vessels to go from Balmore to New York almost without touching the waters of the ocean. 'he Canadian government built the Welland Canal in 1833 and the tate of Michigan finished the locks at Sault Ste. Marie in 1855, thus :moving the last obstacle in the way of navigation from the western ttremity of the Great Lakes to the Atlantic seaboard. In 1848, the linois River was connected with Lake Michigan at Chicago, and a ınal across the portage between the Fox and Wisconsin Rivers gave ı all-water route from Green Bay to New Orleans along the path ıllowed by the adventurous Marquette in his voyage down the lississippi two centuries before.[1]

Railroads quickly manifested their usefulness as a means of trans-›rtation, and by the close of this period the railway traffic of the ›untry exceeded that of all the inland waterways combined. In the :ates along the Atlantic Ocean, the steam railway grew steadily favor from the time of its origin, and by 1840 over 2,500 miles of track as laid east of the Alleghenies. The following ten years witnessed continuation of the growth of railway mileage in the East, but the ›tal number of miles in the Northern Central States in 1850 was only little more than 1,000. The decade from 1850 to 1860, however, 'ought a great augmentation of the railway mileage of the Central 'ates. In the northern section, 10,000 miles of track were laid, ıiting the cities of the Great Lakes with those on the Ohio and Mis-ssippi Rivers, and connecting the entire section with the western rmini of the eastern roads. In the South, a set of roads was con-ructed northward from the Gulf of Mexico to carry the traffic of the ›tton-belt. Early in the decade the trunk lines of the Eastern States ere pushed across the mountains and through railway connection over veral lines was established between the Mississippi Valley and the tlantic Ocean. The Western and Atlantic road connecting Charles-n and Savannah with Chattanooga afforded the first railroad route ross the highland in 1849. In 1850, the New York Central made rough connection with the Great Lakes, and the next year the Erie ıs completed to Dunkirk. The Pennsylvania Railroad, following e route of the main line of the Pennsylvania Canal, was opened to ttsburgh in 1852, and the ambitions of the men that had inaugurated e building of the Baltimore and Ohio road a quarter of a century fore were realized in 1853, when that line was finished to Wheeling. ıicago was connected with New York by a direct rail route in 1853, d St. Louis in 1855, and, by 1858, one railroad reached the Mis-uri River. Thus by 1860 there was ample railway connection among

[1]DeBow, *Resources of the Southern and Western States*, II, 458.

all the States east of the Mississippi, and two States west of that river, Missouri and Iowa, each had more than 500 miles of roads in operation. There was a total of 30,626 miles of railway in the entire country. Of this amount the North Central States had more than a third, the number of miles in Ohio, Indiana, Illinois, Wisconsin, Iowa, and Missouri being more than 11,000, while the North Atlantic States stood second in the amount of railway mileage. Ohio stood first among the States with 2,946 miles, and Illinois second with 2,790. One other State west of the Alleghenies, Indiana, had more than 2,000 miles, and the mileage of Pennsylvania and New York also exceeded that figure.[1]

The growth of the population, wealth, and transportation facilities of the United States from 1830 to 1860, a brief outline of which has just been given, was accompanied naturally by a large increase in the volume of internal commerce. Moreover, there was a decided change in the course of the flow of commodities bought and sold. With the completion of canals and railroads connecting the interior of the country with the eastern coast, the internal commerce lost the peculiar triangular character which distinguished it during the preceding period. The North-Central States, which formerly had been almost wholly dependent on the southern cities and plantations for a market, began to send their agricultural products directly to the Eastern States for consumption and exportation, but at the same time they expanded their shipments to the South, where the increasing population of the cotton-belt created a larger demand for food and live-stock. The Northern States, both east and west of the Alleghenies, in all of which manufacturing had a considerable growth, exchanged their products with each other and both sections sold manufactured goods to the South, where agriculture continued to be practically the sole interest. The South, in turn, sold large quantities of its agricultural products to all the Northern States. The internal commerce of the country, during this period, consisted of a few well-defined currents of trade flowing between certain sections. A large volume of products went from the Central to the Eastern States and a traffic of less volume but of greater value moved in the reverse direction. There was a heavy internal movement of commodities from the Northern to the Southern and a light movement from the Southern to the Northern States. Aside from the trade among these sections, there was an overland trade by pack-horse and wagon with the Far West, which became of particular importance after the discovery of gold. For the sake of greater clearness, these different currents of trade between the various sections will be considered separately and in order as follows: (1) the internal trade between the Eastern and Central States; (2) the internal trade between the North and the South; and (3) the internal trade with the Far West.

[1]For growth of railway mileage in the United States see *Statistical Abstract of United States, 1911*, p. 280; Poor's *Manual of Railroads, 1868–69*, p. 20.

RADE OF EASTERN WITH CENTRAL STATES VIA ERIE CANAL AND GREAT LAKES.

One of the notable features of the internal commerce of the United
:ates after 1830 was the rise of trade on the Great Lakes. Before the
ınstruction of the Erie Canal there was but little commerce on the
kes aside from occasional shipments of stores and provisions to the
attered military posts on the frontier and a small local trade on the
aters of Lake Ontario. After the opening of the canal there was a
rge and steady migration of people to the farming lands of the lake
strict. In the course of a few years thousands of acres of woodland
ere cleared and put under cultivation, the center of cereal production
ıifted rapidly westward, and hundreds of shiploads of grain and
mber were borne over the great inland seas toward the eastern
arkets. Previous to 1830, practically all the eastbound traffic of the
rie Canal originated within the State of New York, but in 1835, the
st year for which statistics were collected, flour and wheat equivalent
amount to 268,259 barrels of flour,[1] from States west of New York,
rived at tidewater by way of the canal, as compared to 868,561
ırrels from the State of New York, and in 1839 the shipments of grain
ıd flour from the Western States to the Hudson River, amounting to
ȝ3,000 barrels of flour, exceeded the New York shipments.[1] The
llowing year the quantity arriving at tidewater from the Western
:ates rose to 1,066,740 barrels of flour, and, increasing steadily, it
ew to 3,084,959 barrels in 1850 and 4,344,387 barrels in 1860.[1]

Ohio was the first of the States west of New York to export grain via
e lakes. The district along the southern shore of Lake Erie was
ıturally the first part of the lake region to be occupied by the incoming
ttlers, and it was the surplus produce of the farms in the northern
unties of Ohio that comprised the earliest shipments of western grain
rough the Erie Canal to the Hudson River. By 1835, wheat and
ur from northeastern Indiana were finding their way to the eastern
arkets through the port of Toledo, and the city of Detroit was begin-
ng to export the agricultural and forest products collected from the
nds of eastern Michigan. In 1836, the first shipment of grain from
ıke Michigan was recorded, a cargo of 3,000 bushels of wheat from
rand Haven to Buffalo.[2] Two years later, a shipment of 78 bushels
wheat from the western shore of Lake Michigan marked the begin-
ng of the exportation of Illinois grain over the Great Lakes and the
auguration of the cereal trade of Chicago,[3] and in 1841 the first
portation of wheat from Wisconsin left the harbor of Milwaukee.[3]

The growth of the grain trade on the lakes was exceedingly rapid.
soon as the Ohio Canal was completed between Portsmouth and
eveland (1832), a part of the surplus grain of Pennsylvania, Ken-

[1] *Monthly Summary of Commerce and Finance*, Jan. 1900, p. 1969.
[2] U. S. Census 1860, *Agriculture*, cxlvi. [3] *Ibid.*, cxlvii.

tucky, and southern Ohio, which formerly had been shipped down the Mississippi River, was diverted to the eastern route to the coast, and as early as 1838 the receipts of wheat and flour at Buffalo were greater than the receipts at New Orleans.[1] The Mississippi was no longer the sole outlet of the great central valley, and in the course of a few years the grain trade on the lakes far outstripped that on the river. In 1842, the shipments of food products from Cleveland alone, valued at $4,431,000, were as large as the shipments from New Orleans.[2]

The repeal of the English Corn Laws in 1846 gave a great stimulus to the cereal production and trade of the United States by opening a larger foreign market for American grain. As the population of the Central States increased and canals and railroads were built to connect the farming districts of the interior with the cities on the lakes, the shipments of grain from the newly settled regions swelled in volume, and the amount sent eastward was constantly augmented by the increasing diversion of traffic from the southern markets. By 1860 the total receipts of grain by lake at Buffalo, Dunkirk, Oswego, Ogdensburg, and Cape Vincent amounted to 61,428,693 bushels,[3] including 2,063,339 barrels of flour, 29,000,000 bushels of wheat, and 18,000,000 bushels of corn. Buffalo always received the largest part of the grain shipped over the lakes, and the receipts at that city offer a fair index of the growth of the lake traffic in grain and flour. In 1836, a total of 1,239,531 bushels of grain entered this city, and the receipts increased thereafter as follows:[4] 5,542,525 bushels in 1841, 13,366,167 bushels in 1846, 17,740,781 bushels in 1851, 25,753,967 bushels in 1856, 37,053,115 bushels in 1860. One barrel of flour equals 5 bushels of wheat.

The superior transportation advantages possessed by Ohio in the two canals extending through the State from the Ohio River to Lake Erie and a third canal from Toledo to Evansville, Indiana, enabled that State to maintain its lead in the grain trade of the lakes for nearly a score of years, but it lost its position when the numerous railways constructed in Indiana, Illinois, and Wisconsin began to carry produce from the interior of those States to the ports of Lake Michigan. An example of the effect of the new railroads was afforded by the Galena and Chicago Union Railway, built in 1849, which in a single year (1852) brought 1,658,725 bushels of grain to Chicago.[5] Illinois soon obtained the lead in the exportation of grain and flour, the shipments from Chicago rising from less than 2,000,000 bushels in 1850 to more than 20,000,000 bushels in 1858;[6] Wisconsin, too, surpassed Ohio in the amount of agricultural produce sent eastward.[7] In 1860, the total

[1] U. S. Census 1860, *Agriculture*, cxlviii and clvi.
[2] DeBow, *Resources of the Southern and Western States*, III, 506.
[3] *Statistics of Foreign and Domestic Commerce, 1864*, p. 159.
[4] *Monthly Summary of Commerce and Finance, Jan. 1900*, p. 2015.
[5] U. S. Census 1860, *Agriculture*, cxlvii. [6] *Ibid.*, cxlix.
[7] Callender, *Economic History of the United States*, 323.

ipments of grain from all the ports on Lake Michigan amounted to ,211,448 bushels,[1] which was more than double the amount shipped om the different ports on all the other lakes. The grain trade on ike Superior during this period was almost negligible. In 1855, out 10,000 barrels of flour passed through St. Mary's Falls Canals id during the six years from 1855 to 1860 the total amount of produce issing through the canals amounted to less than 150,000 barrels of iur and 275,000 bushels of grain other than wheat.[2] No wheat was ipped from Lake Superior ports until 1870.

Though grain and flour constituted the most important part of the oducts moving eastward over the Great Lakes, there was at the same ne a considerable trade in other articles. Large quantities of pork, con, and other provisions were transported to Buffalo for the eastern ade. The receipts of provisions at Buffalo by lake in 1854, the year which they reached a maximum, included 147,898 barrels of pork, ,997 barrels of beef, 20,445,400 pounds of bacon, and 13,575,660 unds of lard.[3] The lumber trade on the lakes was also very large, ough only a small part of the lumber received at the primary lake arkets found its way to the East, most of it being retained for building erations in the rapidly growing cities and towns of the Central States. illions of feet of lumber were sent from the forests of Michigan and isconsin to the ports of Illinois and Ohio. A large part of it was used these cities and most of the remainder shipped by railroad and canal the cities of the interior. The receipts at Buffalo, in 1860, however, iounted to more than 100,000,000 feet of lumber (half of which came om Michigan) and 23,000,000 staves.[4] The lake trade in live-stock ver attained large proportions. By the time stock-raising had iched an advanced state in the lake district, the railroads, which re better adapted than lake vessels to the transportation of cattle d hogs, were able to bid for and secure the traffic. The lake receipts live-stock at Buffalo reached a maximum in 1852, and even for that ar consisted of only 16,000 cattle, 171,000 hogs, and 16,000 sheep.[5] des, wool, and whisky formed a considerable part of the minor icles of lake traffic, and after 1850 soft coal was shipped from Ohio ough Buffalo to central and eastern New York. The shipping of pper from Lake Superior began in 1845, when 1,300 pounds were sent it. This commodity soon became one of the valuable articles of the e trade, the shipments amounting in 1860 to 8,614 tons, valued at 520,000.[6] The iron mines of the Lake Superior district began in 55 to contribute to the lake traffic, and at the close of this period re than 100,000 tons of ore and 5,000 tons of pig-iron were being

[1]U. S. Census 1860, *Agriculture*, cl.
[2]*Monthly Summary of Commerce and Finance, Jan. 1900*, p. 1990.
[3]*Statistics of Foreign and Domestic Commerce, 1864*, p. 162.
[4]*Ibid.*, p. 163. [5]*Ibid.*, 164. [6]*Ibid.*, 154.

shipped annually from Lake Superior, most of it being destined for Cleveland and Pittsburgh.[1]

The west-bound shipments over the lakes were smaller in volume than the east-bound shipments, but they were of greater value. The Erie Canal provided an outlet for large quantities of merchandise from the city of New York, and the value of the goods sent to the Western States by way of the canal and lakes was greater almost every year from 1836 to 1860 than the value of western produce received at Buffalo and Oswego.[2] By 1850 the through traffic moving westward on the canal had a greater tonnage even than the local traffic intended for the people living within the State of New York.[3] The value of the traffic shipped through the canal in 1836 to be forwarded to the Western States was $9,723,250. With the exception of a few losses during the years immediately following, this amount increased steadily until it reached a maximum of $94,230,720 in 1853, after which there was a rapid decline because of the competition of railroads.[4] The shipments to the West were made up of a wide variety of commodities. Dry goods of all kinds, cordage, bagging, boots and shoes, earthenware, hardware, nails, railroad iron, machinery, paper, lead, articles of tin and copper, drugs, medicines, sugar, molasses, coffee, tea, tobacco, fish, salt, and coal, and in the years when emigration was heavy, large quantities of furniture, were included in the west-bound canal freight. From Buffalo and Oswego the traffic was transported on the lake vessels to various ports, whence, together with the products of those cities, it was distributed to the interior over the canals and railroads.

The growth of the shipping on the lakes serves as an index of the growth of the traffic carried on their waters. Previous to 1830, the vessels of the United States employed in the lake trade amounted to less than 7,000 tons. During the following three years this tonnage was more than doubled. By 1841 the total shipping belonging to the lake ports of the United States was more than 50,000 tons, five years later it was more than 100,000 tons, in ten years it tripled, and by 1860 amounted to 450,726 tons.[5] This tonnage included all vessels enrolled in the river and canal trade that centered at the various lake cities, and was not the tonnage of the shipping actually engaged in lake commerce. The actual shipping on the lakes, however, formed more than three-fourths of the above amount. In 1860 it amounted to 393,220 tons, of which 76,717 tons were owned in Canada and the remainder in the United States.[6] Two-thirds of the lake craft in 1860 were sailing-vessels, while the steamers and "propellers" made up 104,543 tons.

---

[1] *Statistics of Foreign and Domestic Commerce*, 1864, p. 154; *Monthly Summary of Commerce and Finance, Aug. 1900*, p. 225.
[2] *Statistics of Foreign and Domestic Commerce, 1864*, p. 181. [3] *Ibid.*, 133. [4] *Ibid.*, 181.
[5] *Ibid.*, p. 143. [6] *Ibid.*, 144.

: remarkable development of the lake district and the rise of trade he water-route between the Eastern and Central States resulted growth of many thriving and populous cities at points affording ercial advantages. The effect of the Erie Canal on the State w York was to be observed in the rapid development of Troy, Syracuse, Rochester, and Buffalo, and as the tide of prosperity l westward settlements on the lakes grew into large, flourishing In 1840, no lake city west of Buffalo contained as many as) people, but twenty years later Cleveland had a population of), Detroit and Milwaukee more than 45,000 each, and Chicago io, while in the interior such cities as Dayton, Fort Wayne, ette, Peoria, Quincy, Dubuque, and Davenport arose under the us of the lake commerce from little cross-roads villages to busy :t cities varying in population from 10,000 to 20,000.[1]

ng at the junction of the Erie Canal with Lake Erie, Buffalo ıe the chief point of transshipment of the large traffic coming and going to the western region. Though smaller than Troy .ochester in 1830 and 1840, it soon passed both these cities after tter year, and by 1860 it had a population of more than 80,000. not a great primary market for grain and provisions, Buffalo ed nearly every year more than one-half of the grain and flour :d eastward on the lakes, and it was by far the most important ıuting point for goods destined for the Central States. Its ts of grain, flour, and live-stock after 1845 were larger than of any other city in the United States, and in 1860 more than ɔoo,ooo worth of merchandise destined for the Central States l through the city. Oswego, located on Lake Ontario and con-l by canal to Syracuse, stood next to Buffalo in the amount of received from the lakes, but its traffic even in its most prosperous rarely attained half the volume of that at Buffalo, and usually much less than half.[2]

: two leading lake cities of Ohio were Cleveland and Toledo. To rmer city came the flour, wheat, corn, and butter and lard from ral districts of Ohio and Kentucky, merchandise from Cincinnati, ails and hardware from Pittsburgh, while its canal and railroads l into the interior the merchandise, furniture, and salt received he East and millions of feet of lumber shipped in from the forests chigan.[3] Toledo for many years shipped more grain via the than any other city except Chicago.[4] Canals reaching the Ohio at Cincinnati and Evansville, and later a network of railroads ling through Indiana and western Ohio, poured large quantities of and provisions, both from those two States and from Kentucky,

---

Census 1900, I, 430–434.

tics of Foreign and Domestic Commerce, 1864, p. 159; U. S. Census 1860, *Agriculture*, cxlviii.

't on Domestic Trade, 1845, p. 378. [4] *Hunt's Merchants' Magazine*, XL, 1859, p. 727.

Illinois, and Missouri, into Toledo for the lake trade, and Chicago sent flour over the Michigan and Southern Railway to this city to take water transportation further eastward.

Detroit, situated near the western extremity of Lake Erie, was the most important port of Michigan and shipped grain, live-stock, wool, and lumber from that State. This city was the largest primary market for Michigan produce and, like Toledo, it added to its commerce by forwarding by water large shipments of flour that came by rail from Chicago, in order to avoid the long trip through Lakes Michigan and Huron. The relation that Cleveland and Toledo bore to Ohio and Indiana, and Detroit to Michigan, Milwaukee bore to Wisconsin. The shipments of grain from that city did not begin until 1841, and in 1845 they amounted to only 133,260 bushels, but in 1860 it exported 9,995,000 bushels of grain, including flour, as well as large amounts of wool, live-stock, and meat.

Of all the lake cities Chicago had the most spectacular growth. Not mentioned in the census of 1830 and with a population of less than 5,000 in 1840, this city was in 1860 a metropolis of more than 100,000 people, having grain receipts almost as great as those of all the other primary grain markets combined,[1] and exporting annually nearly $50,000,000 worth of wheat, flour, corn, live-stock, meat, wool, whisky, and other agricultural products.[2] The year 1838 witnessed the first shipment of wheat from Chicago, consisting of 39 sacks. In 1840 the wheat exports of the city amounted to 100,000 bushels, five years later to more than 1,000,000 bushels, and in 1858, twenty years after the first shipment left the port, Chicago exported grain and flour equivalent to 20,000,000 bushels.[3] Flour was first shipped east from the city in 1844 and corn (which by 1860 formed more than one-half of Chicago's grain shipments) in 1847.[4] The receipts of lumber at Chicago after 1850 averaged nearly 300,000,000 feet each year,[5] most of which was used in the city or sent to the interior towns of Illinois and Indiana. The abundance of corn raised on the Illinois prairies gave that State a leading position in the raising of hogs and cattle, and Chicago rapidly developed into a great meat-packing center, rivaling Cincinnati in the number of hogs slaughtered annually and eventually assuming, in 1863,[6] the lead which it still retains.

TRADE VIA THE PENNSYLVANIA CANAL SYSTEM.

The trade through the Great Lakes and Erie Canal was without doubt the most notable feature of the commerce between the Atlantic coast and the interior of the country during the period from 1830 to

[1] *Hunt's Merchants' Magazine*, XL, 1859, p. 727.
[2] *Ibid.*, XXXVIII, 353; *Statistics of Foreign and Domestic Trade, 1864*, pp. 148–150.
[3] U. S. Census 1860, *Agriculture*, cxlix.
[4] *Monthly Summary of Commerce and Finance, Jan. 1900*, p. 2001.
[5] *Ibid.*, Nov. 1900, p. 1144. [6] *Ibid.*, Feb. 1900, p. 2285.

ɔut this route, though the most important avenue for the ge of commodities between the two sections, by no means d all the traffic. The main line of the Pennsylvania Canal completed in 1832, made it possible for both Philadelphia and ɔre to maintain an extensive trade with cities of the Ohio but this trade, like the wagon trade preceding it, was largely ed, the westward movement of light merchandise exceeding tward movement of western agricultural and animal products. tle grain was shipped over this route from the States west of lvania, and though large quantities of flour, pork, lard, beef, obacco, and hemp were sent annually from Pittsburgh to lphia, they were not sufficient to pay for the cotton, woolen ther goods, porcelain, earthenware, coffee, tea, spices, dried lrugs, and liquors going westward from the latter city. The balance of trade against the Central States was settled by n New Orleans and New York, and with these bills the Phila- and Baltimore jobbers settled their unfavorable balances ew York and Boston, where they bought many of the manu- l articles which they shipped to the West.[1]

ly all the traffic between the Central States and Philadelphia through Pittsburgh, which was situated in an advantageous at the western terminus of the Main Line Canal and occupied e relation with regard to the trade over that waterway that occupied with regard to the trade over the Erie Canal. From rgh the merchandise coming from Philadelphia and Baltimore tributed by means of the Ohio River and the canals and rail- f the Central States among the towns of Ohio, Kentucky, , Illinois, Missouri, and Tennessee, and even to Mississippi tansas.[2] In addition, Pittsburgh sold large quantities of iron, nd bituminous coal to the various cities down the river,[3] and . flour, provisions, and tobacco for local trade and for trans- n to Philadelphia and Baltimore.

hrough trade on the main line of the Pennsylvania Canals pproached the volume of the through trade on the Erie Canal, the local trade over the entire canal system of Pennsylvania d favorably with the local commerce of the New York State In 1844 the traffic passing to and from the Central States . Erie Canal was more than 350,000 tons, and in the same year ugh traffic over the Pennsylvania Canal was less than 75,000 The inclined planes which carried the canal-boats across the ns proved to be an expensive and cumbersome device and the cost of the maintenance and operation of that part of the main

Merchants' Magazine, X, 1844, p 323; XIII, 1845, p. 135. [2]*Ibid.*, X, 1844 p. 325.
, 1844, p. 323; *Monthly Summary of Commerce and Finance, Apr. 1900*, p. 2858.
Merchants' Magazine, XIII, 1845, pp. 130–136.

line improvement west of the Columbia Railway was invariably larger than the tolls received on the traffic passing over it,[1] though the toll-rates were always considerably higher than those charged over the New York waterways. Because of the lack of adequate transportation facilities, the trade of Philadelphia and Baltimore with the Central States suffered constant losses, and for a time New York seemed destined eventually to monopolize the entire commerce between the Atlantic coast and the Mississippi Valley.

TRADE VIA RAILROADS BETWEEN THE EAST AND THE WEST.

In 1841, however, the situation of the commerce between the Eastern and Central States was modified by the entrance of a new factor that foretold a great change in its subsequent development. The new factor was the Western Railroad, the completion of which gave through rail connection between Boston and Albany. Because of its isolated position, Boston had never shared in the direct trade with the Central States, but had been forced to sell its manufactured products through merchants of New York and Philadelphia and secure food products for the people of New England from the same sources. The new railroad completely altered the position of Boston and brought an era of great prosperity to the city. In 1844 the railway transported 300,000 barrels of flour from Albany and Troy to the cities of New England, and two years later[2] 361,000 barrels. New England manufacturers began to consign their wares directly to the merchants of the cities in the Central States. As Boston prospered, Philadelphia declined, losing not only one of its best markets for breadstuffs, but also a large part of the trade in New England dry goods and other manufactures that had formerly passed through the city to the West.[3]

The immediate success of the railroad between Boston and Albany fully demonstrated the practicability of the steam road and stimulated the belief that it possessed advantages superior to those of canals for handling nearly any kind of traffic, and the decade between 1850 and 1860 witnessed the beginning of the competition of the trunk-line railways with the canals for the through traffic between the East and West. The failure of the Pennsylvania Canal and the growing commercial prosperity of Boston incited the people of Pennsylvania to take decisive steps to win back some of the western trade to Philadelphia. That city had the distinct advantage of a shorter distance and a more direct route to the trade centers of the Ohio Valley, and needed only a thoroughfare across the crest of the mountains, connecting Philadelphia with Pittsburgh and later with Cleveland, Toledo, and Cincinnati, so that the grain and live-stock of the cereal-belt would come to the Delaware River in as large quantities as it was coming to the Hudson. In 1846 the Pennsylvania Railroad Company was chartered for the

[1] *American Railroad Journal*, 1856, p. 35.
[2] *Hunt's Merchants' Magazine*, XVI, 1847, p. 325. [3] *Ibid.*, X, 1844, p. 324.

purpose of constructing a steam road that would unite Philadelphia and Pittsburgh. By 1854 the last link of the track was completed and trains were able to move from one city to the other. The business of the railroad immediately surpassed that of the old canal system. The inclined planes of the latter were replaced by a steam portage railway in 1855, but even that improvement failed to make its business remunerative, and in 1857 the State sold the entire "main line of public works" to the railway company. The railway company operated the portage railway less than three months, and it abandoned the canal between Johnstown and Pittsburgh in 1864, but the Susquehanna and Juniata division was maintained for nearly forty years to help in handling the movement of coal and stone.[1]

Even before the Pennsylvania Railroad was finished the New York Central, the New York and Erie, and the Baltimore and Ohio Railroads were carrying traffic between the eastern cities and the trans-Allegheny region.[2] The additional transportation facilities afforded by the trunk-line roads and the numerous railroads built throughout the Central States caused a large addition to the volume of trade between the eastern and central portions of the country and also brought about further changes in the course of internal commerce. In 1860 the Pennsylvania Railroad carried 99,747 tons from Philadelphia to Pittsburgh,[3] two-thirds of which consisted of dry goods, groceries, hardware, boots and shoes, drugs, and coffee, and 176,007 tons from Pittsburgh to Philadelphia, half of which was live-stock, flour, and grain.[4] The same year the New York Central Railroad transported eastward 293,529 tons of through freight, composed almost entirely of vegetable and animal food products,[5] and the through west-bound traffic on the road for the year amounted to 118,977 tons, of which more than 108,000 tons were classed as merchandise.[6] The traffic of the Erie and the Baltimore and Ohio Railroads was as large as that on the New York Central and Pennsylvania, and though only partly classified, was apparently composed of the same kind of commodities.[7] The through traffic on all four trunk-line roads was not yet as large as that passing through the Erie Canal.[8] However, the railroads had succeeded in getting two-thirds of the total flour traffic and practically all the merchandise and live-stock,[9] leaving to the canal only forest products and grain. In addition to the freight taken from the canal, the railroads easily secured the traffic that was accustomed to go from the Northern Central States to the eastern coast and to Europe by way of New Orleans. The lakes and canals had previously made inroads on the commerce down the

[1] Hulbert, *Historic Highways*, XIII, 213–15. [2] See p. 228.
[3] *Statistics of Foreign and Domestic Commerce, 1864*, p. 124. [4] *Ibid.*, 138. [5] *Ibid.*, 140. [6] *Ibid.*, 136.
[7] *Ibid.*, 135; Lord, *The Effect of Secession on the Commercial Relations Between the North and South*, 34.
[8] *Statistics of Foreign and Domestic Commerce, 1864*, pp. 141, 180.
[9] *Monthly Summary of Commerce and Finance, Jan. 1900*, p. 1963.

river, but notwithstanding their influence on the course of trade, the river cities of Ohio and Kentucky continued to send the larger part of their exports southward until the railroads afforded through connections with the East.[1] The speed of the railroads and the superiority of New York as an importing point gave the direct rail routes to the East a decided advantage over the long roundabout route by way of New Orleans. In 1852 the Galena lead trade, which had long formed an important item of the river and coasting commerce of New Orleans, was captured by the railroads.[2] Flour and provisions of Illinois, Indiana, and Kentucky that had formerly been sent to Philadelphia, Washington, Baltimore, and other cities by way of New Orleans or New York were taken directly over the mountains to the points of consumption.[3] Shipments downstream from Cincinnati[4] and other important centers on the Ohio shrunk rapidly in volume and, even before the war broke out, the direct commerce of Cincinnati with the East was much larger than its trade with the South.[5]

The transportation of live-stock from the grain-belt to the Eastern States was taken over almost entirely by the railroads. Neither the Erie Canal nor Pennsylvania Canal had carried many hogs and cattle, though large quantities of meat, lard, and other animal products had been sent to the eastern cities over both these routes. After the rise of the pork-packing industry in Cincinnati and other cities of the Central States, but few live swine were sent to eastern markets. However, the trade in cattle continued to flourish. Large numbers of cattle were driven from Ohio (usually by way of Buffalo and Albany) to New York, where more were slaughtered than in any other city. Illinois, too, raised many cattle, but the distance was too great to permit the driving of fat stock to the eastern coast, and consequently the Illinois farmers sent their cattle to Ohio, where they were fattened for the New York market. The cattle trade of Ohio thus had a period of great prosperity up to 1850, but after that year it quickly declined.[6] The advent of the railroad put an end to the practice of driving fat cattle to distant markets. Moreover, the railroads brought the Illinois prairies nearer to the Atlantic coast than the cornfields on the Scioto had been during the preceding years, and it was no longer impossible for the Illinois farmers to feed their own stock and send it directly to New York and Philadelphia. Ohio was soon surpassed in the production and sale of corn-fed cattle by the corn-raising States farther west. The transportation of cattle was an important source of profit to the western railroads and to the trunk lines, and large numbers of hogs and sheep were shipped from the Central to the

[1] DeBow, *Resources of the Southern and Western States*, I, 253.
[2] *Report on Internal Commerce, 1887*, p. 212. [3] DeBow, *Ibid.*, III, 16.
[4] U. S. Census 1860, *Agriculture*, clviii. [5] *Report on Internal Commerce, 1882*, Appendix 7, 83.
[6] U. S. Census 1860, *Agriculture*, cxxx.

stern States, constituting almost a totally new element in the commrce between the two sections. In 1859 live-stock furnished a larger ount of the through eastward traffic of the Pennsylvania Railroad n any other single commodity,[1] and the other trunk lines and the ways radiating from Chicago, Toledo, and Cincinnati transported h year an increasing number of animals destined for the slaughtering-ns of the East.[2]

While the new railroads in the Northern States were making such rked changes in the course of internal trade, a similar transformation s occurring in the South. Interstate commerce between the eastern l western sections of the Southern States before 1849, aside from ie traffic in slaves, was unimportant. Georgia and South Carolina h had a large internal trade of its own, but very few of the exports n either State were drawn from beyond its western border. In 9, when the Western and Atlantic Railroad began to run trains n Chattanooga to the Atlantic coast, the planters of northern bama and Tennessee, who had always sent their cotton to New eans and Mobile for exportation, turned to the markets of Charles- and Savannah. The cotton receipts at Charleston advanced from ,000 bales in 1848 to 458,000 bales in 1849, and those of Savannah n 255,000 to 391,000 bales, while the receipts at New Orleans fell off rly 100,000 bales.[3] The short crop of 1850 caused a curtailment he receipts of all the southern ports, but it was noticed that Charles- and Savannah together received 35 per cent of the total crop and w Orleans, where two years before more than one-half the cotton p had been marketed, received only 38 per cent.[3] The shifting he center of cotton production farther westward and the continual ease of the annual crop enabled New Orleans to make up for the es to the South Atlantic ports, but these cities, nevertheless, easily ntained their increased trade, the receipts at Savannah rising in o to 525,219 bales and those of Charleston to 510,109 bales.[4] er the completion of the railroad from Chattanooga to Nashville 854 the South Atlantic ports competed with New Orleans and the es on the Ohio River and the Great Lakes for the merchandise le of Alabama, northern Mississippi, and Tennessee, and the pro-ons for Georgia and South Carolina came by rail from Kentucky Tennessee, the coasting trade on the Atlantic seaboard both losing gaining by the changes in the course of trade.[5]

hus by 1860 railway connection was established between the tral States and the Atlantic coast from Massachusetts to Georgia. alf century before, the direct exchange of products between the t and the West had been impossible and it seemed that the Appa-

---

[1] Statistics of Foreign and Domestic Commerce, 1864, p. 138.
[2] DeBow, Resources of the Southern and Western States, II, 555.
[3] Report on Internal Commerce, 1886, lxxi.
[4] Ibid., 374.
[5] Ibid., 140, 149, 157, 164.

lachian highland was to remain an insuperable barrier to close economic and commercial relations between the two great productive regions of the country. The Erie Canal fully demonstrated the value of an eastern outlet for the agricultural and forest products of the great central valley, but the benefits derived from the commerce passing through that waterway had been reaped by only a limited portion of the land, and jealousy and dismay had been the part of the sections not served by the Erie Canal. The railroads could penetrate any region, and with their power to surmount physical and climatic difficulties they were able to distribute the domestic trade more equitably and permit all portions of the country to enjoy in full the benefits arising from their natural economic advantages.

INTERNAL TRADE BETWEEN THE NORTH AND THE SOUTH.

The general character of the commerce between the North and South between 1830 and 1860 differed little from what it had been before that period. East of the Appalachian highlands the exchanges were cared for by the coasting-trade. There was no through rail connection between the two sections until near the close of the period, and consequently almost the entire internal commerce between the North and South, aside from that in slaves and live-stock, consisted of the trade on the waters of the Mississippi River system. A history of the trade between the North and South from 1830 to 1860 is therefore little more than an account of the commerce on the Mississippi.

This period was the golden age of the river trade. Each year it increased steadily in volume, reaching a point of prosperity in 1860 never equaled before or since. Notwithstanding the fact that the Erie Canal, during each year after its completion, carried to the Atlantic seaboard an increasing volume of surplus food products for which formerly the Mississippi River provided the sole outlet, the shipments of flour, grain, and provisions down the river grew almost constantly in magnitude. Until the railroads began to compete for the traffic in flour and provisions after 1850, the cities on the Ohio River sent most of the produce collected at their markets to New Orleans to be shipped to Europe and the Eastern States or to be sold to the planters of the cotton-belt. And even after 1850, when the surplus agricultural produce of the Ohio River country, upon which New Orleans had formerly depended mainly for its supplies, was almost entirely diverted from the river, its place was taken by that coming from the fertile region around St. Louis, where thousands of immigrants from the Eastern States and Europe came to found new homes. Moreover, the loss of traffic in agricultural produce from Pennsylvania, Ohio, and Kentucky was compensated for by the increasing volume of manufactured goods and coal coming down from Cincinnati, Louisville, and Pittsburgh. Thus the downstream movement from the North, though

suffering a heavy relative loss because of the canal and railway competition, made an absolute gain, and, with the enormous amounts of cotton shipped from the Southern States into New Orleans added to this traffic, the Mississippi River carried considerably more produce to the sea than either the Hudson River or the eastern railroads. As before 1830, the trade up the river failed to keep pace with the growth of the movement downstream. New Orleans, though continuously holding the lead in the value of domestic produce exported abroad, received but a small fraction of the imported wares entering the country. Of the shipments upstream from that city, 75 per cent were articles previously sent downstream that had been brought to New Orleans to be resold to the planters of Mississippi, Louisiana, and Arkansas.[1] The region north of these States bought sugar and coffee from New Orleans, but, as before 1830, it drew nearly all its manufactured and imported goods directly from the East, except occasionally some heavy articles of iron which could be transported more cheaply by water through the southern city.

The sales of manufactures and food by northern merchants and farmers to the southern planters, which had begun when the South adopted cotton as a staple, had a steady and uninterrupted growth during this entire period. Levi Woodbury, writing in 1833 of the things he saw in a trip down the Mississippi, said:

> "At every village we find from ten to twenty flat-bottom boats, which besides corn on the ear, pork, bacon, flour, whiskey, cattle, and fowls, have a great assortment of notions from Cincinnati and elsewhere. Among them are brooms, cabinet-furniture, cider, plows, apples, cordage, etc. They remain in one place until all is sold out, if the demand be brisk; if not, they move farther down. After all is sold they dispose of their boat and return with the crews by the steamers to their homes."

As the years went by and the plantations grew larger and the planters wealthier, this practice of peddling from wharf to wharf along the river gradually died out. The planters engaged men at New Orleans to act as their agents in the sale of their cotton and the purchase of supplies for the plantations, and as this custom spread it became necessary for flat-boats and steamers to carry their cargoes to New Orleans, where they were bought and shipped in small packet-boats back up the river.

The flat-boat trade on the Mississippi, which had been surpassed by the steamer traffic even before 1830, continued to form an important part of the river commerce for many years. As late as 1846, the flat-boat arrivals at New Orleans numbered 2,792, over half of which came from Ohio and Indiana. After that year there was a gradual decrease, and in 1855 only 718 arrivals were noted, 249 coming from Indiana with cargoes composed largely of hay, and 203 coming from Pittsburgh with coal. After 1856 the flat-boats ceased to be a factor in the river traffic and were no longer listed among the arrivals at New Orleans.[2]

[1] *Report on Internal Commerce, 1887*, p. 205. [2] *Ibid.*, 222.

Of the profits and benefits arising from the growth of the river trade, New Orleans received the largest share. Between 1830 and 1840 no city in the country kept pace with the southern metropolis in the increase of wealth and trade, and though it fell behind relatively during the next two decades, because of its inability to hold the traffic from the agricultural region of the upper Mississippi Valley, it never suffered the slightest retrogression. It continued to hold its position as the largest city west of the Appalachian highland, advancing in population from 46,310 in 1830 to 102,193 in 1840, and it contained 168,175 people in 1860.

The value of the receipts of produce from the interior at New Orleans in 1830 amounted to $22,065,518.[1] In 1840 the total value was $49,763,825.[1] In 1850 it was $96,897,873, and in 1860 it reached the large figure of $185,211,254.[2] The largest part of this great increase resulted from the growth of the cotton receipts, which in 1860 constituted 60 per cent of the value of all commodities entering the city. The receipts of "western produce," which in 1820 formed 58 per cent of the commodities coming to New Orleans, gradually fell in relative value until in 1860 they amounted to only 23 per cent of the total receipts.[3] But though showing a relative decline, the receipts of provisions and merchandise had a gradual and steady aggregate increase. The receipts of flour at New Orleans, which in 1832 amounted to only 221,000 barrels, advanced to 1,618,000 barrels in 1847, and during the five-year period from 1856 to 1861 they averaged annually 1,150,000 barrels.[4] The receipts of bacon, hams, lard, and pork in 1846 amounted in value to $7,635,208[5] and in 1856 to $16,621,099,[6] and the receipts of corn, wheat, and whisky, though declining slightly in the ten years, still amounted to more than $7,000,000 in 1856.[5] Other important products coming down the river from the Northern States were rope, bagging, lead, oats, hay, potatoes, beef, butter, hides, hemp, staves, and coal,[6] and from the States on the lower Mississippi, New Orleans drew besides cotton large quantities of sugar, molasses, and tobacco. As a cotton market the city had no rival. In 1850, $41,885,156 worth of this great staple was sold in New Orleans, and ten years later the amount was $109,389,228, an increase of 160 per cent. Charleston and Savannah captured some of the cotton trade when their railroads were extended into Alabama and Tennessee, but, notwithstanding this, New Orleans easily maintained the lead.

Of the cities up the Mississippi, St. Louis derived the most benefit from the river commerce. Until after 1855 St. Louis remained strictly a river city, entirely dependent upon the river for both the importation and exportation of the large quantities of flour, grain, meat, tobacco, lead, manufactured goods, and merchandise that entered and left its busy markets. Before railway connection was established between

---

[1] *Report on Internal Commerce, 1887*, p. 199. [2] *Ibid.*, 209. [3] *Ibid.*, 215.
[4] *Monthly Summary of Commerce and Finance, Jan. 1900*, p. 1959.
[5] *Report on Internal Commerce, 1887*, p. 219. [6] *Ibid.*, 220.

t. Louis and the East over the Ohio and Mississippi Railroad (1855) ractically all the commodities leaving the city sought a market in lew Orleans and the smaller cities on the lower Mississippi.[1] But hough most of the steamers leaving St. Louis were destined for New)rleans, the number of arrivals from the Ohio River greatly exceeded he arrivals from the Louisiana city,[2] for St. Louis, like Cincinnati and ittsburgh, secured most of its merchandise and manufactured goods om the eastern ports instead of New Orleans. The trade of St. Louis rew to large proportions after 1840. It was the point for the concen- ation of the agricultural produce of much of Illinois, Iowa, and lissouri, and was likewise the point from which eastern manufactured oods were distributed to many of the inhabitants of those States. 1 1838 St. Louis was still obliged to purchase flour for its own con- ımption, but seven years later it was selling flour to both the Atlantic nd the Gulf States.[3] In 1857 its receipts and manufactures of flour ombined amounted to 1,221,155 barrels, and the same year its receipts f wheat were 3,330,395 bushels and of corn 2,766,062 bushels.[4] Chicago as the only interior city that surpassed it as a primary grain market.[5] s a market for meat, hides, whisky, and tobacco it rivaled all the ading cities of the Central States. It was the principal depot of ie American Fur Company and handled more furs than any other ty in the United States, the skins of bison and other wild animals of ie western plains forming each year a valuable part of its trade. In opulation St. Louis had a phenomenal growth. In 1830 it contained ıly a little more than 5,000 people, and in 1840 only 16,469, but by 345 its population had advanced to 63,491, and in 1860 it reached 50,773. After St. Louis secured railway connection with the East, a rge part of the traffic entering the city from Pittsburgh and Cincinnati as transferred to the railroads, and at the same time some of the affic leaving the city was diverted from the southern river route to the ıstern railway route. However, the volume of trade taken from New rleans was not very large at first, and the movement of commodities oward the south showed no marked decline until the outbreak of the ivil War. Like New Orleans, St. Louis was still a river city in 1860.

THE TRADE OF CINCINNATI.

Cincinnati, Louisville, and Pittsburgh continued to be the important ommercial centers on the Ohio River. The prosperity of these cities as greatly enhanced by the building of the canals that gave them an ıtlet to the East. Cincinnati in particular was benefited by the quisition of the eastern outlet for its hog products, flour, and grain. entrally located at the junction of water routes to both the Atlantic ıd the Gulf coasts, this city profited enormously from the competition etween the eastern and southern markets for the produce of the Ohio

[1] *Report on Internal Commerce, 1887*, p. 53. [2] *Hunt's Merchants' Magazine*, XV, 1846, p. 167.
[3] *Ibid.*, 164. [4] *Ibid.*, XXXVIII, 1858, pp. 222–224. [5] *Ibid.*, XL, 1859, p. 727.

Valley. The chief effect of the Ohio State canals on the trade of Cincinnati was to enable its products to command higher prices in the Southern States rather than to turn the course of its trade suddenly to the East. Until the trunk-line railroads began to compete with the river the merchants of Cincinnati found their most important markets toward the south. A considerable quantity of meat and flour was sent to Toledo, Cleveland, and Pittsburgh for transportation to the east, but the diversion of the Ohio Valley traffic from the southern route before 1850 was accomplished mainly by the concentration at Toledo and Cleveland of much produce that would have come to Cincinnati had the Erie Canal not been constructed. Table 14, which is part of one given by DeBow, showing the destination of certain articles shipped from Cincinnati in 1850–51, indicates how greatly the southern trade exceeded that to the east.[1]

TABLE 14.—*Destination of specified articles shipped from the port of Cincinnati, 1850–51.*

Commodity.	To New Orleans.	To other down-river ports.	To up-river ports.	By canals and railways.	By flat-boats.
Beef, barrels	19,319	68	314	236	1,611
Butter, firkins and kegs	35,200	959	15	8	315
Cheese	69,258	48,432	2,165	1,900	920
Candles, boxes	76,245	20,272	10,695	6,195	522
Flour, barrels	281,609	95,943	7,719	4,859	95,877
Lard, barrels	22,854	117	3,277	4,143	1,821
Lard, kegs	56,380	5,358	5,739	2,823	1,587
Pork, barrels	112,622	1,055	3,801	4,608	3,781
Pork, pounds	1,345,860	755,860	1,559,280	1,092,953	525,820
Whisky, barrels	140,661	56,164	31,231	3,268	17,980

This table reveals plainly that, with the exception of meat products, the shipments from Cincinnati to the eastern cities were very small in comparison to the shipments to the cotton States, and that the river commerce of the city was by far the most important element of its trade. Under the stimulus of its commercial prosperity Cincinnati grew very rapidly in population from 24,831 in 1830 to 115,436 in 1850, and 161,044 in 1860, at which time it was the second largest city west of the Appalachian highland and a close rival of New Orleans for first honors. After 1850 the railroads accomplished what the canals had only partly effected: they altered the course of the main current of the Cincinnati export trade and transferred the chief commercial interests of the city from the South to the East. In 1855 the value of the exports from Cincinnati to the East was almost equal to the value of the exports to the South.[2] During the three years preceding 1860 the shipments of flour and wheat from Cincinnati stood as shown in table 15.[3]

[1] DeBow, *Resources of the Southern and Western States*, I, 253.
[2] *Report on Internal Commerce, 1882*, Appendix 7, 83. [3] U. S. Census 1860, *Agriculture*, clviii.

Thus at the outbreak of the Rebellion, Cincinnati had ceased to be rictly a river city, and the commerce of the Mississippi had received blow from which it was never to recover, though, as indicated before, ɪe increase of the amount of merchandise and coal floated down the hio, the growth of the cereal shipments from the St. Louis district, ɪd the constant development of the cotton trade prevented any ɪmediate decrease in the volume of receipts entering New Orleans.

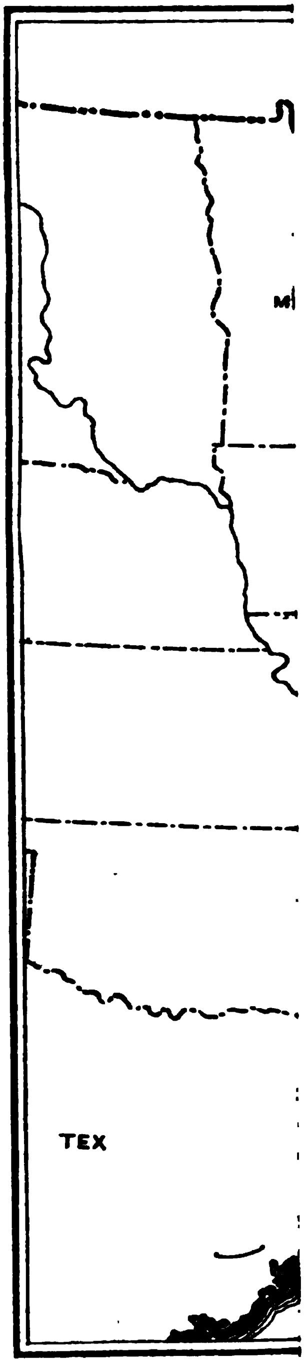
TABLE 15.—*Shipments of flour and wheat from Cincinnati, 1857, 1858, 1859.*

Commodity.	1857		1858		1859	
	South.	North.	South.	North.	South.	North.
Flour, barrels......	162,565	445,650	17,569	544,570	92,919	385,389
Wheat, bushels.....	30,446	601,214	1,182	270,531	11,341	310,154

Thus the river trade of the Mississippi Valley maintained an impornt position in the domestic commerce of the United States. "Notɪthstanding the relative losses it suffered, it never failed to exhibit ɪ annual increase, and the last year of this period (1859–60) was the best year on the river." This year stands on record yet as the maxium of river prosperity, showing the largest receipts at New Orleans ɪd the heaviest trade the lower part of the river has ever carried. owever, the growth of commerce on the Mississippi had failed sigɪlly to keep up with the growth of wealth and population of the great ea that the river drained. The bulk of the produce of the Ohio alley had been diverted to the railroads and canals and only oneurth of it was being carried to the South.[1] Charleston and Savannah ɪd captured the trade of northern Alabama and eastern Tennessee, ɪd after 1850 the Mobile and Ohio Railroad began to carry much of .e cotton of Mississippi to the Alabama seaport.

The enormous growth of the grain traffic on the eastern routes to the aboard and the relative decline on the southern route, and the diverɔn of the cotton traffic to other Gulf ports and the cities on the south tlantic coast, engendered in the minds of some commercial leaders New Orleans grave fears for the continued prosperity of the river ade. DeBow, in a speech at Nashville, in 1851, declared that ɪrthern enterprise had "rolled back the mighty tide of the Mississippi ɪd its ten thousand tributary streams until their mouth, practically ɪd commercially, is more at New York and Boston than at New rleans,"[2] and he earnestly exhorted the people of the South to construct ilroads radiating from the Crescent City, by which it was asserted, :he travel and much of the trade" would be taken off on the very banks

[1] *Report on Internal Commerce, 1887*, p. 215.
[2] DeBow, *Resources of the Southern and Western States*, II. 484.



M
TEX

of the rivers.[1] Such warnings and appeals were unavailing. New Orleans remained apathetic, partly because of the prosperity resulting from the tremendous growth of its cotton trade, and partly because of the impossibility at that time of convincing the people that railroads could successfully compete with river transportation.

However, evidence was not lacking that railroads would ultimately gain the ascendancy over the river, even in the transportation of cotton and other southern products. One notable proof of the superiority of the railroad was the rise of the so-called "overland movement" of cotton, which in 1859 began to take on large proportions. In that year 106,678 of the 786,521 bales of southern cotton consumed in Northern States were transported to the factories entirely by rail. In 1855 only 7,661 bales had been shipped north on the railroads, and in 1850 practically all of the 475,702 bales used in the northern mills had been transported in coasting vessels to the northern seaports.[2] None of the cotton sent north by rail passed through New Orleans. The development of the overland movement injured both the river and the coasting trade. It represented a definite loss to the commerce of New Orleans and at the same time added a new factor to the internal trade between the North and South. Furthermore, it indicated that the trade on the lower Mississippi was beginning to decay and that it was doomed inevitably to sink to relative insignificance whenever a network of railways overspread the region from which the river drew its traffic. Another generation was to see the construction of railroads to parallel the great natural highway and witness the fulfillment of the "Cassandra warnings" uttered by DeBow and others during the decade before the war.

Next to the river commerce, the trade in live-stock and slaves was the most important element in the commercial intercourse between the North and South. Each year large droves of horses, mules, cattle, and hogs were driven into the South from the northern and "border" States. It was estimated in 1845 that in the preceding twenty years the southern planters had spent $900,000,000 in the neighboring States for mules, horses, implements, and clothing.[3] Buckingham stated in 1841 that 10,000 horses and mules came every year from the Middle Atlantic and Western States to the South Atlantic States.[4] Rearing mules for the southern markets was an important occupation in Kentucky and Tennessee, where the extensive grazing-lands could be used for that purpose more profitably than for any other, and the farmers all over the corn-raising section of the country found an unfailing source of gain in the demand for live-stock in the southern cottonfields.

[1] DeBow, *Resources of the Southern and Western States*, II, 456.
[2] *Report on Internal Commerce, 1879*, pp. 122, 128.
[3] Ingle, *Southern Sidelights*, 55.
[4] Buckingham, *Slave States in America*, II, 203; also in Callender, *Economic History of United States*, 292.

he domestic slave-trade of the United States commenced to be of ortance after 1820, when cotton culture, with which the institution lavery was so intimately connected, began to spread among the es along the Gulf. During the years from 1830 to 1860 the slave fic was very large. The price of an adult negro in 1790 had been), but as the demand for slaves in the cotton-belt expanded, the e rose until in 1840 it was $500; in 1850 it was $1,000, and in 1860 l plantation hands brought from $1,400 to $2,000 each.[1] Slaves e sent to South Carolina, Georgia, Alabama, Mississippi, Louisi- Arkansas, and Texas, from plantations in Virginia, Maryland, th Carolina, Kentucky, Tennessee, Missouri, and Delaware, the eholders in the latter group of States finding it more profitable to ose of their negroes at the prices prevailing in the cotton States ı to keep them for labor on their farms. Though no statistics of volume of the internal slave traffic exist, evidence from contem- ıry accounts make it plain that the trade was unquestionably nsive. Olmsted in 1856 estimated that considerably more than oo negroes were sent annually from the border States to the cot- States,[2] and at the prices then existing the traffic must have had ılue approaching $30,000,000 a year, thus giving it an important e among the commercial interchanges between the North and th.

INTERNAL TRADE OF THE FAR WEST

ong before Texas had gained independence or the California terri- had passed into the possession of the United States, enterprising chants on the western frontier began trading with the Mexican ements situated in what is now the State of New Mexico. In 1821 ıall caravan of pack horses went from Franklin, Missouri, to Santa with dry goods and other light merchandise. Large profits were zed on very small quantities of goods, and the traders were en- aged to expand their business. In 1824, wagons drawn by mules oxen were introduced as a means of transportation, and the same the old "Santa Fe Trail" was made an authorized road by an act ongress. By 1843 the export trade with the Mexican settlements ıe Southwest had grown to an annual value of nearly $500,000.[3] a few years the trade was almost entirely shut off by the hostile n of President Santa Ana, but after the occupation of the western tory by the United States troops in 1846 it began again and assumed er proportions than ever before. From 1847 to 1859 the average ıal value of merchandise carried in wagons to New Mexico was ıt $1,150,000, and in 1860 the total value was $3,500,000.[4] The shipping-points were Independence and Kansas City, Missouri.

mmond, *The Cotton Culture and the Cotton Trade*, 51. [2]*The Cotton Kingdom*, I, 58.
ort on *Internal Commerce, 1889*, p. 563; *Hunt's Merchants' Magazine*, XI, 1844, p. 475.
ort on *Internal Commerce, 1889*, p. 565.

Transportation was supplied by regular freighters, who employed a large number of men to conduct the white-topped "prairie schooners" across the broad expanse of unsettled country between the Missouri River and the mountains. New Mexico paid for its imports with bullion and wool produced within the Territory, and with the money secured by the sale of sheep driven to California or by the sale of the scanty agricultural produce, which was disposed of at remunerative rates at the government military posts and Indian agencies.[1]

In addition to the wagon trade with New Mexico, the Missouri River cities carried on a similar commerce with Utah, which was occupied by the Mormon settlers in 1848. Utah was closer to California than to the Missouri River points, but the inferiority of the roads to San Francisco made transportation to that city more expensive than to Kansas City or Leavenworth. The traffic carried to the Mormon settlements consisted chiefly of dry goods, groceries, hardware, and drugs. No statistics of the volume of trade were kept, but it is estimated that it never reached more than 12,000 tons a year, which was somewhats maller than the trade with Santa Fe.[2]

When gold was discovered in Colorado in 1859 there was an immediate rush of settlers to that territory, which was accompanied by the rise of a heavy trade in tools and provisions. A stage-line was started between Leavenworth and Denver to accommodate the gold-seekers hurrying to the newly found deposits, and the next year (1860) the line was continued to Salt Lake City. A line was already in operation between that city and San Francisco, and thus regular passenger service was established entirely across the United States.[3]

There was no overland freight traffic to or from the Pacific coast. The commerce of California with other parts of the country, aside from the sheep trade with New Mexico, was all carried on around Cape Horn or across Central America. The internal trade within California itself, however, was extensive. Mining camps in the mountains drew from San Francisco their supplies of tools, machinery, and food, which were shipped in boats up the Sacramento and San Joaquin Rivers and hauled in wagons to the mining districts. The freight rates on the rivers were $75 a ton and the rates for land transportation were simply enormous,[4] while passenger fares were strictly in keeping with the charges for freight service. San Francisco was a city of 58,802 in 1860 and its manufacturing establishments turned out more than $19,000,000 worth of products, the most important of which were flour, sawed lumber, sugar, and liquor,[5] all made from products carried to the city in boats and wagons. Only 30 miles of railroad were to be found in California in 1860, but the growth of industry and commerce promised a rapid accumulation of capital that was to develop

[1] *Report on Internal Commerce, 1889*, p. 566. [2] *Ibid.*, 1890, p. 853. [3] *Ibid.*, 1890, p. 123. [4] *Ibid.*, 1890, p. 124. [5] *Ibid.*, 373.

a transportation system within the State as well as assist in the construction of the transcontinental railroad line to connect the Far West with the loyal States of the East.

SUMMARY.

The expansion of the volume of the internal trade of the United States during this era of industrial and agricultural expansion more than justified the expectations existing in 1830. The improvement of the facilities for communication and transportation permitted a continually increasing accentuation of territorial division of labor, which fostered the growth of mutual dependence between regions where geographic, social, or other conditions led naturally to the predominance of a special type of industry. The manufacturing and commercial population of the Northeastern States was fed by the farm products of the Central States, and the inhabitants of the Central States drew their imported supplies, clothing, shoes, and large quantities of general merchandise from the eastern markets. The South relied almost entirely upon the North for food, manufactures, and imported goods. In 1860 the wheat production in Florida, Alabama, Mississippi, Louisiana, Arkansas, and Texas amounted to only a peck for each inhabitant. Food for the entire cotton-belt was raised in northern fields, and the clothing, tools, and machinery consumed in the Southern States were made in northern factories. The North in turn bought from the South raw materials for northern sugar and cotton industries, and northern shipping interests carried to European markets the heavy exports of southern cotton, the proceeds from which paid the southern debts in Northern States and settled the large unfavorable balance of the northern foreign trade.

Domestic trade was several times larger than the foreign trade. Foreign exports comprised but a small fraction of the great volume of wealth annually produced. In the treasury report of 1847–48, Secretary Robert J. Walker said:

"The value of our products exceeds three thousand millions of dollars. Our population doubles once in every twenty-three years and our products quadruple in the same period. Of this \$3,000,000,000 only about \$150,000,000 are exported abroad, leaving \$2,850,000,000 at home, of which at least \$500,000,000 are annually interchanged among the States of the Union."

In 1854 DeBow estimated the value of home and foreign commerce at \$1,500,000,000. It is probable that in 1860 the interstate commerce alone amounted to almost \$1,000,000,000.

Israel D. Andrews gave the estimate of the amount and value of domestic trade that is presented in table 16.[1]

Before 1830 the chief problem in regard to internal commerce had been the creation of a market for the agricultural produce of the great

[1] *Report on Colonial and Lake Trade* (prepared in 1852), p 905.

central grain-belt. There was an urgent necessity for the development of a non-agricultural population that would consume the superfluous supply of food products and give the farmers an opportunity to exchange their grain for commodities which they could not produce for themselves. During this period the development of manufacturing in the North, the spread of cotton culture in the South, and the opening of foreign markets to American grain created the demand for cereal products and relieved the embarrassed agricultural interests of the grain States. Of these three factors, the development of manufacturing was by far the most important. As factories multiplied in the Northern States, large industrial and commercial cities arose, and the population

TABLE 16.—*Estimated tonnage and value of domestic commerce, 1851 and 1852.*

	Net. [Less duplications.]		Gross.	
	Tons.	Value.	Tons.	Value.
Estimate of 1851:				
Lake commerce	1,985,563	$157,236,729	3,971,126	$314,473,458
River commerce	2,033,400	169,751,372	4,066,800	339,502,744
Aggregate	4,018,963	326,988,101	8,037,926	653,976,202
Estimate of 1852:				
Coasting trade	20,397,490	1,659,519,686	40,794,980	3,319,039,372
Canal commerce	9,000,000	594,000,000	18,000,000	1,188,000,000
Railway commerce	5,407,500	540,750,000	10,815,000	1,081,500,000
Aggregate	34,804,990	2,794,269,686	69,609,980	5,588,539,372

of these great urban centers consumed the largest part of the surplus produce of the farmer and provided the market so urgently needed. The growth of the cotton industry in the South and the rise of the foreign grain-trade were also important factors in the solution of the problem of securing a market, but the amount of produce of the Central States consumed in the South and in Europe was small in comparison to the large shipments made to eastern manufacturing districts or in comparison to the quantity consumed in the manufacturing and commercial centers of the grain-belt itself.

To what degree the tariff legislation of 1824 and 1828 was responsible for the growth of manufacturing in the United States has been a debatable question. That manufacturing continued to grow after the tariff had been reduced to what was almost a revenue basis is evidence that protective duties were not needed to sustain the manufacturing industries, but whether these industries would have been started on as large a scale without the encouragement afforded by the tariff legislation previous to 1830 is at least uncertain. Whatever may be the merits of the

ments concerning the tariff of this period, the fact remains that the lopment of manufacturing was the chief factor in solving the diffi- r of supplying a market for agricultural produce. Furthermore, enactment of the tariff laws of 1824 and 1828 represented an effort he part of the people to employ legislative measures to ameliorate economic condition. When it was no longer deemed necessary tain high import duties for the purpose of creating a market, the y of protection was gradually abandoned, and the provisions of tariff measures enacted in 1846 and 1857 were governed chiefly by iderations in regard to the revenues of the Federal Government.

he problem of supplying adequate transportation facilities con- ed to confront the nation during this period, and in the solution of question the people employed their political institutions. Nearly f the numerous canals built throughout the country after 1825 some of the earliest railroads of the Central States were public rprises undertaken by the State governments. However, the es were financially and administratively unable to cope alone the transportation problem. Many of them embarked in unwise y ventures foredoomed to failure; bankruptcy and repudiation wed, and the private corporation replaced the State in the field of sportation. But though the corporations assumed the initiative control, they were unable to carry out their various projects alone, it was by means of generous aid given directly by local and State rnments, and indirectly by the Federal Government, that the sportation system of the country was developed.

was unfortunate that the Federal Government, while so active eveloping markets and providing transportation facilities, was not lly active in attempting to establish a satisfactory currency sys- In 1837 the country was visited by a disastrous financial panic, tly attributable to ill-advised financial administration by the rnment and to extravagant speculation, much of which would been impossible had there existed a system by which the issue of it money could have been properly regulated. Again, in 1857, an of speculation culminated in a panic, which, however, was not so re nor so long protracted as that of 1837. Both these crises seri- y impeded industry and commerce, but because of the abundance eal wealth in the country there was in neither instance a great dation of material progress.

n the whole, the period from 1830 to 1860 was one of great pros- y and contentment. The wealth of the country grew enormously, for the most part it was equally distributed, there being few ers and few very rich individuals. The twenty years following have been called the "golden age" of American history, and as as concerns the widespread diffusion of material comforts they rve the name.

Notwithstanding the great material prosperity that attended the country, however, the spirit of sectionalism which had arisen during the contest over the adoption of the "American system" remained strong even after the question of protection had practically ceased to be an important political issue. Feeling that the economic progress of the North had been effected largely at the expense of the South, and fearful that the propaganda of the abolitionists and the successful efforts of the northern political leaders to restrict the territorial extension of slavery foretold the ultimate intention of destroying that institution altogether, the southern people decided to sever the political bonds between the two sections, the economic institutions of which differed so widely, and to establish a separate State whose political ideals would conform to the economic conditions and social ideals of the South. This decision the South stood ready to enforce by an appeal to arms; the people of the North preferring "to accept war rather than that the nation should perish," made ready to prevent the proposed dissolution of the Union; and the era of general happiness and comfort ended amid the rumblings of the impending struggle.

CHAPTER XV.

ECONOMIC DEVELOPMENT, 1860 TO 1900.

Changes produced by the Civil War, 254. Development of the United States from 1860 to 1900 in population and wealth, 256; in agriculture, 257; in mining, 262; in lumbering, 263; in manufacturing, 263; in transportation, 266.

The Civil War marked a notable turning-point in the economic history of the United States. National development since 1860 has been shaped to a large degree by fundamental political and economic changes that occurred during the war—changes which were, for the most part, the effect of various expedients resorted to by the Federal Government to enable it to bring the struggle for the preservation of the Union to a successful issue. To crush the military strength of the South the Federal authorities adopted the expedient of the abolition of slavery and, to the surprise of both the North and the South, "the cause of the conflict ceased before the conflict itself," and the country emerged from the war freed of the greatest obstacle to its social homogeneity. To secure revenue for the prosecution of the war, the duties on imports were raised between 1861 and 1866 to an unprecedented point, and when Congress failed, after the return of peace, to reduce the tariff schedules to their old level, manufacturing interests found themselves protected by a tariff so high that foreign competition was largely eliminated. To secure needed aid in financing the costly struggle, Congress established the national banking system, which gave more uniformity to the currency and brought the financial centers of the country into closer relation. The anxiety to connect the Atlantic and Pacific coasts by rail led the Federal Government to adopt the practice of granting large subsidies to the builders of great transcontinental railway lines. The stimulation which the war gave to manufacturing and transportation in the North and the shrewd manipulation of the money market during the years of the national crisis made possible the accumulation and concentration of large quantities of capital funds under the control of a small number of persons.

It was inevitable that such radical changes would modify the course of industrial progress. Because of the importance of slavery as the underlying cause of the war, there has been a natural tendency to regard its abolition as the most striking and significant net result of the great conflict, but it is to be doubted whether the emanicipation of the negro had as great an effect on subsequent economic development as the other innovations, which were so obscured by the turmoil of the war that they received but little attention and were regarded as being of much less significance. The complete transformation in the tariff

policy of the nation permitted the growth of manufacturing to an extent that likely would have been impossible had the war not occurred; the construction of the transcontinental railroads had an immeasurable effect on the development of the great region west of the Missouri River; the concentration of capital provided the means by which industrial enterprises could be carried out on a gigantic scale; the establishment of a uniform currency and a better banking system accelerated the growth of industry and trade. It is in these changes that is found the explanation of much of the economic history of the United States since the Civil War.

The period from 1860 to 1900 was one of development and exploitation. The years prior to the Civil War had been marked by the advance of the political authority of the United States to the Pacific Ocean, and at the same time the nation had enjoyed an era of notable agricultural, industrial, and commercial prosperity, especially in the States east of the Mississippi River. However, the tremendous possibilities of the country were only beginning to be realized in 1860 and, remarkable as was the development before that year, it was completely eclipsed by the amazing progress made during the latter part of the century. An abundance of unoccupied land of rich and varied natural resources, favorable climatic conditions, a complete absence of checks on individual initiative and enterprise and of restrictions on internal communication and trade, and the encouragement afforded to industry by the liberal policies of the Federal Government all combined to create exceptional economic opportunities. Labor, capital, and transportation facilities alone were needed, and as these increased the wealth production of the United States multiplied with great rapidity. The extension of the railway system permitted the constant growth of agriculture and rendered accessible the mineral and forest products in which the land abounded; cheap and plentiful raw materials from field, mine, and forest made possible a rapid increase of manufacturing. European immigrants, eager to share in the wealth of the new world, poured in to recruit the labor force necessary for the industrial conquest; and the invention and application of labor-saving machinery of every description greatly increased the effectiveness of the effort of each individual. All parts of the country participated in the material progress. The South recovered from the state of prostration in which it was left by the ravages of the disastrous war, and became more prosperous and flourishing than ever; the Northern States east of the Mississippi increased their agricultural production and also became one of the greatest manufacturing and mining districts in the world; on the prairie lands west of the Mississippi a new cereal kingdom was founded; the western plains were converted into live-stock ranches; and the forests, orchards, and grain-fields of the Pacific States proved to be greater sources of wealth than were their mines of gold and silver.

ıtistical account of the economic progress of the United States 60 to 1900 gives an idea of the rapid exploitation of the resources country during that period, and while the figures involved in ı account are of too great magnitude to convey an adequate ion as regards the actual volume of national wealth, they eless afford a standard by which the growth of the country measured and furnish a basis for comparing different times ferent sections. An understanding of the expansion of com- rom 1860 to 1900 would be impossible without a knowledge of terial progress that was made, and the story of the internal ill be preceded by a sketch of the economic development during forty years of the century.

POPULATION AND WEALTH.

e forty years following 1860 the number of people in the United exclusive of outlying possessions, rose from 31,000,000 to 00. Table 17 shows the total population of the continental of the country and the number of inhabitants per square mile census, with the percentage of increase for each decade from 1900.[1]

TABLE 17.—*Number, density, and increase of population of the United States, decennial censuses, 1860–1900.*

Year.	Population.	Number of inhabitants per square mile.	Percentage of increase.
1860	31,443,221	10 8	35 6
1870	38,558,371	13 3	22 6
1880	50,155,783	17 3	30 1
1890	62,622,250	21 2	24 9
1900	76,303,387	25 6	20.7

ate of increase of the number of inhabitants was considerably ı it had been during the period before the war, but the decennial in density of population was larger than it had been before. ection of the country east of the Mississippi, where the rapid ment of manufacturing, mining, and transportation created a mand for wage laborers, the greatest actual increase of numbers l. Most of the 14,000,000 foreign immigrants who entered the during the four decades settled in this section, and they and scendants formed a large part of the added population. How- e rate of increase in the States east of the Mississippi was not o large as the rate of increase in the States west of the river, actual increase of numbers in the western section was suffi- great to cause the center of population to advance steadily

[1]U. S. Census 1900, *Population*, I, 2–6.

nearer the Mississippi. The agricultural region between the river and the western mountains began to fill up very rapidly after the war, and the population of the western-central group of States rose in forty years from 4,000,000 to 17,000,000. The movement to the Far West, which had begun during the fifties, went constantly forward, and the States along the Pacific coast and in the mountain section, with an increase of population from a little more than 500,000 to more than 4,000,000, showed a higher rate of growth than any other section of the country.

The wealth of the nation increased at a much more rapid rate than the population. Between 1860 and 1900, the total wealth of the country, as given in the census reports, grew from $16,159,616,000 to $88,517,306,775, a per capita increase in the forty years from $514 to $1,165.[1] These figures convey some idea of the growth of the productive capacity of the people and of the material progress of the country as a whole. It would be impossible to give a detailed account of the innumerable industries to which the energies and resources of the nation were devoted to create such a vast total; only some of the large basic ones may be considered.

AGRICULTURE.

The growth of agriculture, which had been one of the most conspicuous features of the development of the United States before 1860, proceeded on a still greater scale after the war. Within two decades the country assumed the leading place among the nations of the world in the production of grain and live-stock, maintaining at the same time its supremacy as a producer and exporter of cotton and tobacco. The chief reasons for the great increase in the farming industry were the existence of an enormous area of fertile land, the application of machinery to the cultivation of the soil, and the fact that foreign and domestic markets expanded to a degree sufficient to absorb the greatly augmented annual production.

West of the Mississippi River in 1860 lay wide areas of rich soil yet untouched by the plow. In 1862 the Homestead Act was passed, by the provisions of which farms were granted without charge to persons who would settle on the land and maintain a residence for at least five years. The opportunity to secure a comfortable home on such easy terms was eagerly seized by thousands of people. During the twenty years between 1860 and 1880 the Federal Government gave away 65,000,000 acres of land to various individuals; the "frontier" disappeared before the advance of the sturdy "homesteaders;" and much of the western prairie was transformed into grain fields. In the western section of the Northern Central States, where the greatest agri-

[1] *Statistical Abstract of United States*, 1911, p. 702.

l development took place, the population increased 4,000,000 twenty years following 1860. In the rest of the region west of ssissippi the increase was but little less rapid, and by 1880 ve of westward migration had swept across the continent. the remainder of the century the West continued to fill up pidly. The less desirable grain-land was occupied, large tracts soil were irrigated and added to the cultivated area of the , and wide sections of the western plains were fenced off and ed into sheep and cattle ranches. In 1860 the total number s in the United States was 2,044,077, comprising 407,212,538 f land. By 1880 the number of farms doubled, with a total area of 130,000,000 acres, and by 1900 there were 5,739,657 with an acreage of 841,201,546,[1] while the value of farm property ed during the forty years from $7,980,493,000 to $20,514,001,000. addition of 400,000,000 acres to the agricultural domain of the would have been impossible had it not been for the rapid growth se of agricultural machinery and the consequent transformation methods of farming. Not only did the improved methods of ure make possible the cultivation of a much larger quantity of it they added greatly to the productivity of each unit of land or, thereby cheapening the products of the farm for the con- without curtailing the profits of the farmer.

e the Civil War broke out, the application of machinery to ure had spread to a considerable extent. The withdrawal of a rt of the labor-supply to recruit the armies greatly stimulated of labor-saving devices while the war was in progress, and after rn of peace the practice was continued on a still more extensive Improved cultivators, seeders, reapers, threshers, and other es, and the substitution of horse-power and steam-power for labor multiplied the productive capacity of a single man more elve fold in the half century between 1830 and 1880. The f farming implements in use increased from $246,000,000 in $407,000,000 in 1880 and to $761,000,000 in 1900.[2]

less significance was the improvement of the mechanical and the processes by which raw products of the farm were , transported, and converted into commodities ready for the er. The roller process of manufacturing flour made the spring f the Northeast superior to winter wheat as a breadstuff. The for separating cotton seeds from the fiber were greatly improved. hods of slaughtering live-stock and of packing and transporting were revolutionized. The marketing of the annual product ilture was made possible only by the use of unique devices by e various commodities could be handled and transported in a edy, and economical manner.

[1]U. S. Census 1900, *Agriculture*, I. xvii. [2]*Ibid.*, xxix.

The most striking feature of the new agricultural era was the rapid expansion of the exportation of farm products, especially of cereals. The development of the grain-raising industry subsequent to 1860 gave rise to an annual product far in excess of domestic needs, and it was fortunate for the farming interests and for the country as a whole that it was found possible to dispose of the large yearly surplus abroad. The exportation of grain in large quantities began during the Civil War, when the grain States lost temporarily one of their most important domestic markets. After the close of the war the internal grain trade quickly surpassed its former proportions; but, rapidly as the home market expanded, the increase of the volume of production was considerably greater, and of the entire amount of wheat raised in the country between 1870 and 1900, nearly a third was sent abroad for consumption.[1] The exportation of cotton, which had constituted the most important part of the foreign trade in agricultural products for several decades before 1860, was almost completely stopped while the war was in progress, but after 1865 it soon regained and surpassed its former volume. More than two-thirds of the cotton raised in the United States between 1865 and 1900 was exported.[2] For the last quarter of the nineteenth century the United States was the chief source of supply of food products for nations of western Europe, as well as the chief source of supply of raw materials for some of their most important industries. The increase in the volume of exports to Europe created and maintained a balance of trade by which abundance of new capital was obtained for use in the United States. Thus the growing foreign market not only made possible the rapid agricultural progress, but furnished the means of creating and expanding many other lines of industry.

TABLE 18.—*Cereal production in the United States, 1860, 1880, 1900.*

Census year.	Production.					
	All cereals.	Corn.	Wheat.	Oats.	Rye.	Barley.
	bushels.	*bushels.*	*bushels.*	*bushels,*	*bushels.*	*bushels.*
1860	1,242,000,000	839,000,000	173,000,000	173,000,000	21,000,000	16,000,000
1880	2,699,000,000	1,755,000,000	459,000,000	408,000,000	20,000,000	44,000,000
1900	4,435,000,000	2,666,000,000	659,000,000	943,000,000	26,000,000	120,000,000

Among the various products grown on the farms of the United States after 1860 the cereals held by far the most important place. The advance in cereal production is shown by table 18.[3]

The cereal crop of 1899 constituted nearly half of the total value of all the crops raised in the country and almost a third of the total value of all farm products of that year.

[1] *Statistical Abstract of United States, 1911*, p. 563. [2] *Ibid.*, p. 566.
[3] U. S. Census 1900, *Agriculture*, II, 64–89.

Corn was the leading grain, composing more than a half of the entire cereal production. As an article of commerce, corn remained somewhat less important than wheat, most of it coming to the market in the form of beef, pork, poultry, or dairy products. The center of corn production shifted rapidly westward during this period. In 1860 Missouri was the only State west of the Mississippi River that held a place among the five leading corn-producing States. In 1870 and in 1880 Iowa held second place, and in 1890 and 1900 four States west of the Mississippi—Iowa, Kansas, Nebraska, and Missouri—were among the five leading corn States. Every census from 1860 to 1900 except one showed Illinois as holding first place, the one exception being that of 1890, when Illinois lost precedence to Iowa. The shifting of the center of wheat production was no less marked. Illinois still maintained the lead in 1880, but after that year the wheat-belt around the lakes rapidly lost precedence to the great spring-wheat area of the northwest. In 1900 Ohio was the only State east of the Mississippi to rank among the five leading wheat States, the other four being Minnesota, North Dakota, South Dakota, and Kansas. The wheat crop of Minnesota alone in 1899 amounted to more than 95,000,000 bushels, a quantity almost equal to the wheat production of the entire United States a half century before.

The production of cotton in the United States was given in the various census years as follows:[1] 5,387,052 bales in 1860; 3,011,996 in 1870; 5,755,359 in 1880; 7,472,511 in 1890; 9,534,707 in 1900.

The Civil War left agriculture temporarily prostrated in the cotton States. Thousands of acres of land passed out of cultivation, the majority of the large planters were ruined financially, and the evils of the labor system during the "reconstruction" period made recovery slower than it otherwise should have been. By 1880, however, the South had regained its agricultural prosperity and the new era of small farms, free labor, and cultivation by tenants was inaugurated which brought about an even more rapid progress in the cotton-belt than had occurred during the days of slavery. The failure to perfect cotton-picking machinery prevented the development of cotton-culture at a rate equal to that of the development of grain-raising in the North, but the improvement of devices for planting, fertilizing, cultivating, and handling the crops, and the utilization of the seeds, stalks, and roots of the plant, which had formerly been discarded as waste, greatly stimulated the industry and added largely to the profits of the planters.

Hay and forage continued to hold an important place among agricultural products. The development of the dairy business, the increase in the number of draft animals used on farms, and the growth of the cattle-raising industry in the West made necessary the production of hay in large quantities, and while it was not as important an article of

[1] U. S. Census 1900, *Agriculture*, II. 425.

commerce as many other farm products, it took high rank as to tota value. The crop increased from 19,000,000 tons in 1859 to 79,000,00 tons in 1899, ranking in value next to corn among the agricultura products of the latter year.[1]

The production of tobacco increased from 434,000,000 pounds i 1859 to 868,000,000 pounds in 1899, Kentucky leading in this articl at every census year following that of 1860.[1] Cane sugar and rice wer other important commodities of the South, the production of bot nearly doubling in the four decades.

The live-stock in the United States increased in value fro $1,089,000,000 in 1859 to $3,078,000,000 in 1899,[2] when it compose 15 per cent of the total value of the farm property of the nation. N country in the world made use of so many horses in farm work as th United States, and no country raised so many animals to be converte into food for human consumption. The greatest live-stock belt wa developed in the Northern Central States, where the immense crop of corn were used to fatten hogs and cattle for the meat-packin industry. Great improvement was made in the breeds of all kind of live-stock, the period of feeding was reduced, and the entire live stock business was placed on a scientific basis. Improved method of refrigeration made meat-packing possible in summer as well as i winter, and the introduction of the refrigerator car in 1869 made i possible within a few years to ship to the most distant markets th fresh meats prepared in the great packing centers of the Central States

Among the most important products of the farm were butter, cheese milk, poultry, and eggs. Table 19 shows the amounts of these commodities produced in 1860, 1880, and 1900.[3]

TABLE 19.—*Dairy and poultry products in the United States, 1860, 1880, 1900.*

Product.	1860	1880	1900
Butter, pounds	459,681,000	806,672,000	1,491,872,000
Cheese, pounds	103,664,000	243,158,000	248,345,000
Milk, gallons	....	[1]530,129,000	7,266,392,000
Chickens and other fowls, number	....	125,507,000	250,682,000
Eggs, dozens	....	456,911,000	1,293,819,000

[1]Amount sold.

The value of the butter, milk, and cheese produced in the United States in 1899 was $472,000,000,[4] a sum greater than the value of an single agricultural crop except corn and hay, and the value of th poultry and eggs, amounting to $281,000,000, was almost equal to th value of the cotton crop. In the case of these commodities, too

[1]U. S. Census, 1900, *Agriculture*, II, 526.
[2]*Statistical Abstract of United States, 1911*, pp. 150–156.
[3]*Ibid.*, I, 700.
[4]U. S. Census 1900, *Agriculture*, I, cxxi

ved methods of handling and transportation were adopted which :d the extent of the market accessible to the sections producing n large quantities, and consequently added to their commercial ancė.

MINING.

less impressive than the progress of agriculture in the United between 1860 and 1900 was the development of the mining ry, though unfortunately the exploitation of the mineral resources continent during the period was characterized by wastefulness :travagance. Those minerals which form the basis of modern ry—coal, iron, and copper—no country in the world possesses er quantities than the United States; and in the production of is metals, gold and silver, of the mineral fuels, petroleum and id of other important commercial minerals such as lead, alumi- phosphate of lime, zinc, stone, gypsum, sulphur, and clays, the y has a high rank. The total value of the output of the mines United States rose from $218,598,994 in 1870 to $1,107,031,392), an increase of 400 per cent.[1] The increase in the production most important minerals is shown in table 20.[2]

20.—*Quantities of important minerals produced in the United States, 1860, 1880, 1900*

Product.	1860	1880	1900
Coal, long tons........	13,044,680	63,822,830	240,789,310
Copper, long tons......	7,200	27,000	270,588
Iron ore, long tons......	... .	7,120,362	27,553,161
Petroleum, barrels......	500,000	26,286,123	63,620,529
Natural gas, dollars.....	....	[1]215,000	23,698,674
Zinc, short tons........	.. ..	23,239	123,886
Aluminum, pounds.....	....	....	7,150,000

[1]Year 1882.

ie production of coal, iron, and copper the United States easily other nations of the world at the end of the century. In 1860 antity of anthracite coal mined exceeded that of bituminous, fore 1880 the production of the latter was considerably greater iat of the former, and by 1900 was nearly four times as large. lvania continued to be the only State in which anthracite was in large quantities, and it also maintained the lead in the pro- ı of bituminous, its output of 71,000,000 tons in 1900 being imes that of Illinois, its nearest competitor. Coal-fields were ɔed in practically every Northern State from Pennsylvania to ınd the deposits of Alabama, Tennessee, New Mexico, Arkansas, :ky, and Virginia contributed more than a tenth of the total

[1]*Statistical Abstract of United States, 1911*, p. 737. [2]*Ibid.*, p. 735.

output of soft coal in the United States in 1900.[1] The abundance of cheap fuel permitted a rapid utilization of the rich deposits of iron in Pennsylvania, Alabama, and the Lake Superior district. The copper deposits of the Lake Superior region, which contributed most of the output before the war, were worked on a much greater scale during the latter part of the century, and the mines of Montana and Arizona, opened after 1880, became an important factor in the production of this valuable metal. The petroleum field of Pennsylvania, tapped first in 1859, was the only one developed largely before 1880, but ten years later the output of Ohio was almost as large as that of Pennsylvania, and in 1900 the important fields in West Virginia, Indiana, and California were each contributing several million barrels of oil yearly. Crude oil and its products became important factors in domestic and foreign trade, as well as the basis of important manufacturing industries. The discovery of natural gas revealed a further source of fuel supply, and was followed by a conspicuous growth of manufacturing in the Northern Central States, the territory in which gas was first found in abundance.

The value of the gold production of the United States averaged nearly $40,000,000 a year from 1860 to 1900. The output of the silver mines never fell below an annual amount of $31,000,000 after 1872. Practically all of the output of both metals came from the Western States.

LUMBERING.

The forests of the country were subjected to the same rapid exploitation as the other natural resources and in a manner yet more extravagantly wasteful. Extensive building operations, the construction and maintenance of an enormous mileage of railway track, and the growth of manufacturing created a heavy demand for timber, and by 1900 the annual cut amounted to nearly 35,000,000,000 feet. The northeastern group of States, which had formed the chief source of the lumber-supply before 1860, lost precedence by 1880 to the Lake States of Michigan, Minnesota, and Wisconsin, and this section in turn was surpassed by the Southern States by 1900, the yellow pine of that section comprising more than a fourth of the production of the entire country. The timber-lands of the Pacific States contributed more than 2,000,000,000 feet each year after 1890.[2]

MANUFACTURING.

The most significant feature of the economic history of the United States between 1860 and 1900 was the rise of manufacturing. Previous to this period the country had been primarily agricultural. It has

[1] *Statistical Abstract of United States, 1911*, p. 216. [2] *Ibid.*, p. 167.

already been recounted how the inability to dispose of surplus farm produce abroad had led in the early twenties to the adoption of a system of protective tariffs to encourage manufacture. When resulting expansion of manufacturing industries and the removal of foreign restrictions on the entry of American agricultural products had brought relief to the agricultural interests, the necessity of encouraging the growth of manufacturing at a faster rate than would have occurred under normal conditions had been obviated and the practice had been discontinued. The result had been a tendency in the United States to invest capital in all varieties of industry. Consequently economic development before 1860 had been in the main symmetrical. Agriculture had maintained the lead because physical conditions gave it a peculiar advantage; ship-building and shipping had grown steadily, reaching a point of maximum development just at the opening of the war; manufacturing, too, had increased largely, but the increase had not been due, after 1846 at least, to any conditions tending to give it an unnatural advantage in the competition for capital.

This situation the war abruptly changed. In the first place, the armies demanded large quantities of clothing, arms, wagons, and other military supplies and the manufacture of these articles was greatly stimulated. In the second place, one of the most important sources of profits of the northern shipping interest, the carrying trade between the Southern States and Europe, was suddenly cut off, and though the export trade of the North Atlantic ports expanded somewhat, the increase was not nearly enough to overcome the reduction in the total foreign trade occasioned by the loss of southern exports and the decrease in imports. The changes which occurred in New England after the enactment of the tariff of 1824 were repeated on a larger scale. Capital hitherto invested in foreign trade was invested elsewhere, many sailors entered the navy or engaged in other occupations, and the tonnage of the merchant marine of the United States engaged in foreign trade fell more than 1,000,000 tons, almost 45 per cent, between 1861 and 1866. And finally, the imposition of heavy tariffs while the war was in progress greatly enhanced the profits to be derived from manufacturing by insuring a domestic market free from foreign competition.

Had Congress, after the close of the war, reduced the tariff schedule to the level of 1860, it is probable that a flood of foreign imports, similar to that following the war of 1812, would have swamped many of the new manufacturing plants, and the subsequent economic history of the United States would have more nearly resembled that before the war. But the southern influence which had been able to compel the tariff compromises after 1830 was absent in 1865, and the northern sentiment against protection was unable to muster sufficient strength to counteract the powerful influence brought to bear upon Congress

to make the war tariffs a permanent part of the national program. The result was inevitable. Manufacturing almost immediately became the dominant industry, because it promised the largest returns on investments. The value of the manufactured products of the United States increased 124 per cent between 1859 and 1869, exceeding the value of the total products of agriculture for the latter year by $2,250,000,000. The decline of the merchant marine engaged in foreign trade has continued unchecked to the present day, and though agriculture, for reasons given before, has continued to expand wonderfully, its growth was far less rapid than that of manufacturing.

The rapid rise of manufacturing between 1860 and 1900 is shown in table 21.[1]

TABLE 21.—*Growth of manufacturing in the United States. Decennial censuses, 1860 to 1900.*

Census year.	Capital invested.	Wage-earners employed.	Value of products.
1860	$1,009,855,715	1,311,246	$1,885,861,676
1870	2,118,208,769	2,053,996	4,232,325,442
1880	2,790,272,606	2,732,595	5,369,579,191
1890	6,525,156,486	4,251,613	9,372,437,283
1900	9,817,434,799	5,308,406	13,004,400,143

Of course, the radical change in the tariff policy was not alone responsible for the great industrial expansion. The growth of manufacturing in the United States would have been impossible without a corresponding growth of the domestic market for manufactured commodities, and the mere fact that foreign competition was largely excluded was not the cause of the expansion of the domestic market. Indeed, the elimination of competition permitted such high prices that without the influence of other important factors in the industrial evolution of the country the effect of the policy of seclusion might have been to arrest rather than to hasten development. The enormous increase of agriculture throughout the entire country, and particularly in the West and South, was the chief factor in the creation of a large home market for manufactured goods of every description. Furthermore, great natural resources offered an apparently unlimited supply of raw materials and cheap fuel. The self-sufficiency of the nation enabled it to carry out a program of industrial independence that could have been attempted in but few other countries. Furthermore, in manufacturing as in agriculture, acting as both cause and effect, there was a steady evolution in methods of production. Growing dependence on steam and electricity as sources of motive power, discoveries of new processes, invention of mechanical devices of every description and improved means of transportation and communication were all potent factors in this epoch of progress.

[1] U. S. Census 1900, *Manufactures*, I, xlvii, 3.

The increase of the value of manufacture: ections of the country was as shown in table 22.

TABLE 22.—*Value of manufactured products in the United*

	1860	1880
New England States.....	$468,599,287	$1,106,158
Middle States..	802,338,392	2,219,072
Southern States..........	193,462,521	338,791
Central States...........	341,710,554	1,502,637
Western States	7,114,012	72,518
Pacific States............	72,636,910	130,400

The States along the Atlantic coast maintai icturing, but the increase in the Central State ;ast, and since 1880 there has been a distinc ianufacturing in the South. The census of 1 tates the value of manufactured products was n nd in 4 States—New York, Pennsylvania, Illinoi he value was more than $1,000,000,000.[2] Fift 1 1900 as having each produced more than $ ictures, New York leading with a product val nd Chicago and Philadelphia ranking second a

All the manufacturing industries of the count ensus report of 1900 under 15 headings, rankin f their products as follows: food and kindred p nd their products, textiles, hand trades, lumbe niscellaneous industries, metals and metal pr nd steel, paper and printing, leather and its fi :als and allied products, vehicles for land nd beverages, clay, glass and stone products, 'he first four of these groups each showe ian $1,000,000,000, that of food and kindred 2,777,702,000. Of the single industries co iere were 33 having an output in 1899 of m nd 22 more with an output of more than $50,0 roducts took the leading place with a total val ext in order were slaughtering and meat- iachine-shop work, lumber and timber prod rist-mill products, each valued at more than $

TRANSPORTATION.

Simultaneously with the expansion of agricul rest and mineral resources and the rise of manu tates, partly as an effect of them but almost ie development of the great transportation sy

[1]U. S. Census 1900, *Manufactures*, I, clxxiii. [2]*Ibid.*, ch
[4]*Ibid.*, cxlv. [5]*Ibid.*, clxiii.

The period of 1860 to 1900 was the era of the railroad. Before the Civil War, the superiority of the steam railway over rivers and canals had been demonstrated. The decade from 1850 to 1860 had witnessed the completion of a comprehensive railroad system in the Northern States east of the Mississippi River. Many lines had been planned in the South, but construction had not been especially active, except in those States along the Atlantic coast. Only six States west of the Mississippi possessed any railway lines in 1860, and two of these, California and Arkansas, had less than 50 miles. Not a single foot of track had been laid between the Missouri River and the Rocky Mountains. However, railway building was constantly becoming more active, and plans were afoot to make large additions to the existing mileage when the Civil War broke out and suddenly checked most of the railroad building that was in progress.

Almost immediately after the war ended there began a period of rapid and extensive construction. The entire country was seized with a mania for railroad speculation. Over 35,000 miles of track were laid between 1865 and 1874, an increase of almost exactly 100 per cent in the total mileage of the country. It was during this time that the first transcontinental railroad, begun in 1864 and built largely by means of the liberal aid given by the Federal Government, was completed (1869). Unfortunately, the enormous increase in the railway mileage during these years was considerably in excess of the needs of the country, and the speculative fever which attended the expansion resulted in the severe financial crisis of 1873.

Following 1873 there was a period of business depression lasting for five years, during which there was little railway building. This was followed by a second and much greater revival. Between 1878 and 1890 over 85,000 miles of new line were added to the railway system, the total number of miles in the latter year reaching 167,191.[1] Four more transcontinental lines were completed and others partly built; the region between the Mississippi and Missouri Rivers and the plains of the Southwest were supplied with railroads, many new lines were added in the Southern States, and the trackage was greatly increased in New England and in the trunk-line territory. Many of the western roads were constructed in advance of the settlement of the country, the builders relying on subsequent development of the land for the creation of traffic for their lines.

By 1890 railroad construction had reached a point where there was no longer a need for such a rapid extension as had occurred during the previous ten years, and the annual increase of mileage began to decline. This decline was accentuated because of the severe financial depression following the panic of 1893. Not only was further construction almost halted, but existing roads suffered losses because of decreased traffic

[1]*Statistical Abstract of United States*, *1911*, p. 745.

and many of those built during the prosperous years of the preceding decade were forced into bankruptcy. The return of prosperity in 1898, however, saw a slight rise in the rate of annual increase of mileage. In 1900 there were 198,964 miles reported in the entire country.[1]

The increase in mileage was attended by a constant improvement in the physical elements of the railway. The roadbeds were made more substantial, rails of wood and iron gave way to all-iron rails, and these in turn were succeeded by the rails of steel, the quality and weight of which were steadily increased; the high-speed passenger locomotive, the heavy freight engine, the improved passenger coaches, the large freight cars used for ordinary traffic, the many types of freight cars designed for special kinds of traffic, and the numerous mechanical devices for promoting safety, comfort, and economy were all evolutionary products of this period. The complex freight terminal, the yards, buildings, and mechanical equipment which are of such importance in freight transportation, developed during these years, and the modern passenger terminal came into existence in response to the needs created by the rapid expansion of great urban centers.

The important results of the steady growth of railways and the improvement of their equipment were an improved service and reduced charges. At the close of the period before the war it had been demonstrated that railroads could carry economically high-grade freight such as flour, live-stock, lighter manufactured goods, and general merchandise, but as yet they had not been able to compete successfully with waterways in the transportation of grain, and the carriage for long distance of low-grade freight such as coal and ore had not been attempted. As the railway developed, however, its use was extended, and it was found in a few years that there was no commodity so cheap that it could not be profitably handled. Accompanying this extension of the service to include all kinds of bulky freight was an uninterrupted decline in the general level of transportation rates on all classes of goods, resulting from the increased efficiency of the roads, the struggles of competing lines, and above all from the tremendous increase of traffic. The receipts per ton per mile on the entire amount of freight carried decreased by more than one-half between 1867 and 1897,[2] the average charge falling from 1.92 cents to about 0.80 cent. Moreover, the charges were not in exact proportion to distance carried, the rate per mile usually being lower for longer hauls. This reduction of transportation charges was one of the most potent factors determining the course of economic growth. Field, mine, forest, factory, and store were linked together into a unified whole; raw materials could be concentrated at any point; and there was practically no limit to the extent of the market for finished commodities.

[1] *Statistical Abstract of United States, 1911*, p. 745.

[2] For a statement of the costs of transportation in this period consult the documents attached to Gallatin, "Report on International Improvements," in *American State Papers, Miscellaneous*, I, especially the letter of Robert Fulton, p. 917.

As the railway system developed and railroad rates declined, transportation on most of the inland waterways of the country, which had been so important in earlier times, diminished. Though for almost a score of years after the war the traffic on the most important rivers and canals became somewhat larger, in no case did the increase compare favorably with the growth of railroad traffic or keep pace with the commercial progress of the country as a whole.[1] After 1880 there was a gradual absolute decrease of nearly all canal and river traffic. Nearly 1,700 miles of canals were abandoned between the years 1860 and 1900.[2] In New York the railroads reduced the proportion which canal freight bore to the entire freight tonnage carried across the State over canals from 44 per cent in 1868 to 5 per cent in 1898.[3] In the value of tonnage transported the reduction was even greater, the canal traffic gradually becoming limited to heavy bulky commodities.

Transportation upon the Mississippi River system suffered a similar decline. Though after the war there was a brief period of prosperity, during which many large steamboats were built and profitably operated, yet there was a large relative loss to the railroads. DeBow's prophecy that the railways would handle traffic on the very banks of the river was literally fulfilled, and though the Federal Government spent many millions of dollars to improve the Mississippi, it failed to check the decay of the river commerce. The entire freight carried on all the rivers of the Mississippi Valley in 1889 amounted to 29,405,000 tons,[4] and the traffic ten years later was probably less. Considerably more than half of this tonnage was carried on the Ohio River and its tributaries, the coal traffic out of Pittsburgh being almost the only freight that the river was able to compete for successfully with the railroads.[5]

Though the commerce on the canals and rivers sunk in importance, that on the Great Lakes thrived and expanded under the unusually favorable conditions prevailing for the development of traffic on those bodies of water. The iron and copper mines, forests, and grain-fields around Lake Superior furnished an enormous tonnage for water transportation to the manufacturing districts around lower Lake Michigan and Lake Erie, and a considerable quantity of coal and merchandise was carried westward to the interior. The sail and steam tonnage on the lakes rose from 390,000 in 1870 to 1,441,000 in 1900,[6] and the cargo tonnage for the latter year was more than 45,000,000. The rate of growth of lake traffic compared favorably at all times with that of the traffic on railways.

[1] *Preliminary Report of Inland Waterways Commission*, 227; *Report on Internal Commerce of United States, 1876*, pp. 101–119.

[2] *Preliminary Report of Inland Waterways Commission*, 204–209. [3] *Ibid.*, 217.

[4] U. S. Census 1890, *Transportation by Water*, 435. In 1906 the traffic had fallen to 27,856,000 tons. (See *Preliminary Report of Inland Waterways Commission*, 133, and U. S. Census 1906, *Transportation by Water*, p. 33.)

[5] *Preliminary Report of Inland Waterways Commission*, 118.

[6] U. S. Census 1906, *Transportation by Water*, 122.

CHAPTER XVI.

INTERNAL TRADE, 1860 TO 1900.

scope of internal trade of the United States, 1860–1900, 270. Trade in
and flour, 271. Live-stock and animal products, 276. Cotton, 278. Other
roducts, 282. Coal, 283. Iron ore, iron, and steel, 285. Other minerals,
'orest products, 287. Progress of manufactures, 290. Growth of the volume
nal commerce, 293. Summary, 293.

ce has been well defined as taking things from where they ul to where they are needed. This being true, the volume commerce of any country must invariably depend upon the its population, the total volume of its production, the secrsity of its products, the efficiency and cheapness of its trans- and the freedom from foreign competition in the sale of nmodities in home markets. In the economic progress of l States from 1860 to 1900 there was a continuous and rapid nt of all the requisite factors for the existence of a large ade. Population more than doubled, annual production per adrupled, the sectional diversity of products became more d, and the transportation system developed to a degree led the utmost fluidity of movement to all articles of trade. re, the range of movement of internal trade was greatly y the settlement of the vast expanse of new country west of sippi River.

ension of the area over which trade flowed and the develope railroad as the chief agency for transportation gave to the mmerce of this period a character widely different from that nmerce of previous years. Before 1860 the extent of the area of the United States and the facilities for transportation that the bulk of internal trade followed two distinct routes: l-west route over the Erie Canal or the trunk-line railroads, h-and-south route over the waters of the Mississippi River. tly internal-trade movements were comparatively simple, practicable to study them geographically. The westward of the population and the development of the great railway tely put an end to the simplicity which characterized the e period before 1860. The old lines of trade were modified way. In the course of time direction and distance ceased a profound influence on commercial intercourse. The railtted a north-bound movement of traffic in the Mississippi h in time reached the volume of the south-bound movement; es made overland shipments of manufactures and merchan- Francisco and secured from that city the fruit and lumber

of California and the teas and spices of the Orient. Every section could exchange its products directly for the products of any other section. Rival producers separated by long distances invaded the local territory of one another.

The wide extent of the internal trade and the complexity of its movements during this period render it impracticable to deal with it in the manner adopted in previous chapters, and therefore the subject will be approached in a different manner. First, separate studies will be made of the trade in several of the great commodities which constitute most of the materials of commerce; following this will be a brief discussion of the total volume of internal trade; and finally a short conclusion dealing with the most vital economic and political problems connected with commercial development during the forty years.

CEREALS AND FLOUR.

The history of the grain trade from 1860 to 1900 centers around the receipts and shipments at the great primary grain markets situated on the Great Lakes and the rivers of the upper Mississippi Valley. Already by 1860 the region around the lakes had assumed the lead in the production of cereals and several cities of the Northern Central States, chief among which were Chicago, St. Louis, Cincinnati, Milwaukee, and Toledo, had become large primary markets where great quantities of grain and flour were concentrated to be shipped to domestic markets in the South and East for home consumption and to the seaboard for exportation to foreign nations. As cereal production increased and the center of production moved westward, other markets further to the north and west assumed a position of importance in the handling of the great volume of surplus grain.

In 1900 the chief surplus cereal area of the United States comprised a vast stretch of territory included in a semicircle described by a southern and western sweep of a compass moving on a radius extending from Duluth to Buffalo.[1] Of the 4,500,000,000 bushels of grain produced in the United States in 1899, three-fourths were raised in the twelve States embraced in this territory. The ten most important primary grain-markets in the region, each of which was receiving annually from 10,000,000 to 300,000,000 bushels of grain, were Chicago, Minneapolis, Duluth-Superior, St. Louis, Milwaukee, Toledo, Kansas City, Peoria, Cincinnati, and Detroit. From each of these points there radiated toward the north, south, and west a network of railways over which grain came from the farming districts and over some of which there was a return movement of flour and grain for domestic consumption or for exportation from southern seaports, while stretching to the eastward were numerous rail and water lines by which a large

[1] *Report of Industrial Commission, 1900*, VI, 37.

and flour traffic was carried to the n
ng cities of the Atlantic States. T
ipments of grain at Chicago during c

TABLE 23.—*Receipts and shipments of grain*

Flour.		Wheat.	
Receipts.	Shipments.	Receipts.	Shipme
barrels.	*barrels.*	*bushels.*	*bushe*
713,348	698,132	14,927,083	12,402
1,766,037	1,705,977	16,394,409	16,432
3,215,389	2,862,737	23,541,607	22,796
4,358,058	4,131,586	14,248,770	11,975
9,313,591	7,396,697	48,048,298	36,649,

Year.	Oats.	
	Receipts.	Shipments.
	bushels.	*bushels.*
....	2,198,889	1,091,698
....	10,472,078	8,507,735
....	23,499,915	20,649,427
....	75,150,249	70,768,222
....	105,226,761	77,554,695

e 23 is given as an illustration of
trade. Though the receipts and shi
ago did not increase at such a rapid
y increase at all of them until the c
rkets farther west the rate of growth
cago. The volume attained by th
ed by table 24, showing the receipts
principal primary markets.[2]
development of the grain trade duri
same commercial rivalry among citie
transportation routes that characte
s preceding the Civil War. Before 1
rn and eastern routes to the seaboar
latter. The grain received at Ne
rom points farther north than St. Lo
nore than sufficient to satisfy the d
plantations, and both the coasting
n port had been considerably redu
it a temporary stop to all shippin
either for consumption or exportatio

[1]*Report of Board of Trade of Chicago, 1901*, p. 2
[2]*Monthly Summary of Commerce and Finance*,
[3]*Report on Internal Commerce, 1887*, pp. 286, 3

important branch of the trade was immediately reflected in a sudden expansion of shipments to the East over the Erie Canal and trunk-line railroads, and a rapid rise in the exports of grain to Europe.[1] The return of peace saw an immediate resumption of the grain and flour trade with the cotton States, and throughout the remainder of the century this trade continued to flourish. The Gulf ports also made attempts to share in the export grain trade. The fact that the corn-belt extended farther to the south than the wheat-raising district enabled the southern ports to secure a considerable portion of the

TABLE 24.—*Receipts and shipments of grain at primary markets, 1900.*

RECEIPTS.

City.	Wheat.	Corn.	Oats.	Barley.	Rye.	Flour.	Total grain and flour.
	bushels.	*bushels.*	*bushels.*	*bushels.*	*bushels.*	*bushels.*	*bushels.*
Chicago	48,048,298	134,663,456	105,226,761	17,813,919	1,973,701	9,313,591	349,637,295
Minneapolis	83,312,320	6,502,410	10,837,160	4,551,970	509,730	223,102	106,717,549
St. Louis	20,860,805	20,834,060	15,728,130	1,939,993	686,810	2,170,548	69,817,264
Duluth	31,815,000	4,186,000	1,402,000	2,692,000	625,000	4,519,540	61,057,930
Milwaukee	10,848,939	5,779,850	8,506,100	16,250,831	1,165,150	3,012,625	56,107,682
Toledo	9,228,000	24,829,000	6,973,000	453,000	358,000	1,195,000	47,218,500
Kansas City	34,775,450	8,334,250	3,341,600	16,000	170,950	....	46,638,250
Cincinnati	2,961,211	14,005,973	7,392,957	1,173,742	442,215	2,561,977	38,104,995
Peoria	674,000	18,595,300	11,263,000	1,899,700	156,000	837,170	36,355,265
Detroit	2,611,909	3,378,934	3,217,836	1,469,622	325,416	285,500	12,288,467
SHIPMENTS.							
Chicago	36,649,956	111,099,653	77,554,695	5,739,009	1,223,796	7,396,697	265,552,245
Minneapolis	10,937,010	1,303,610	3,932,210	3,830,980	506,280	14,954,806	87,806,717
St. Louis	12,473,366	22,682,765	7,588,703	121,460	431,778	2,535,206	54,706,499
Duluth	30,859,000	3,548,000	851,000	2,685,000	611,000	4,860,250	60,425,125
Milwaukee	2,166,431	4,958,140	7,962,205	8,348,776	793,398	3,788,658	41,277,911
Toledo	5,150,000	23,103,000	6,600,000	452,000	353,000	2,022,000	44,757,000
Kansas City	28,499,450	5,588,250	1,576,000	8,800	138,950	....	35,811,450
Cincinnati	2,270,728	10,902,716	4,315,478	222,168	162,653	2,161,744	27,601,591
Peoria	304,950	5,371,990	10,948,100	1,363,481	39,900	841,130	21,813,506
Detroit	846,874	1,956,564	428,097	51,420	195,667	226,900	4,499,672

exports of corn, but in the competition for wheat and flour they were almost uniformly unsuccessful, until during the last five years of the period, when some of the powerful railroads to the South entered into a vigorous rate war with the eastern lines, which resulted in a quick diversion of a large part of the grain traffic. From 1878 to 1897, with the exception of two years, in which there were unusually large crops (1892 and 1893), the Gulf ports never secured as much as 10 per cent of the annual wheat exports of the country, and usually their share was less than 5 per cent. Their portion of the total exports of flour during these

[1] *Monthly Summary of Commerce and Finance, Jan. 1900*, pp. 1964, 1969, 2015; *Year Book of U. S. Department of Agriculture, 1911*, p 682.

years never reached 2 per cent; but the rate war begun in 1896 quickly effected a marked change, and three years later 29 per cent of the wheat and 3.9 per cent of the flour exports left via the harbors of the Gulf.[1]

Among the eastern cities which so long held the supremacy in the foreign grain trade there was even a keener competition than existed between them collectively and the seaports of the Gulf. Before the trunk-line railroads had been constructed, the Erie Canal had given New York the unquestioned lead as a distributing and exporting point of western products, but when the railroads had begun to compete actively for the transportation of eastbound grain and flour, New York had been obliged to surrender to other Atlantic ports a share of the trade. In 1860 the railroads were carrying two-thirds of the flour traffic, but as yet were transporting but a small quantity of grain to the eastern seaboard. The struggle for the carriage of grain was seriously begun while the war was in progress, and by 1867 the rail routes had captured 38 per cent of this traffic and the elimination of the canal as an important factor in the transportation of grain was clearly indicated. A succession of fierce rate wars after 1870 resulted in the downfall of the canal traffic and also brought about a compromise among the various trunk lines, whereby the competing cities on the Atlantic coast were placed on a more nearly equal footing. The effect was seen in the gradual decrease of the percentage of grain exports from New York and a rise in the exports from the seaports farther south,[2] and at the same time the heavy shipments of grain and flour intended for domestic use in the East took direct routes to the various centers of consumption.

An important feature of the cereal trade was the growth of the grain traffic on the Great Lakes, especially the growth of the traffic in wheat and flour. Until early in the eighties Chicago maintained the lead as a wheat and flour market and the railroads were able to divert a large part of the trade from Lake Michigan, but when after 1880 the center of wheat production shifted toward the northwest, Chicago lost precedence in the wheat trade to both Minneapolis and Duluth, and a great quantity of wheat and flour began to move eastward by water from ports on Lake Superior. The growth of the traffic passing through St. Mary's Falls Canal (table 25) shows the rapidity of the increase of the Lake Superior shipments.[3] During the late nineties there was also a heavy increase of the shipments of coarse grains by this route, the amount rising from 8,000,000 bushels in 1895 to 30,000,000 bushels in 1899. The lake grain-trade from the ports of Lake Michigan began to recover its lost ground after 1880, when the sharp competition with the railroads was abated, and at the close of the century the lake shipments of wheat and corn from Chicago were much larger than

[1] *Monthly Summary of Commerce and Finance, Jan. 1900*, p. 1984. [2] *Ibid.*, 1986. [3] *Ibid.*, 1990.

the shipments by rail. The railroads, however, maintained the lead in the transportation of flour and oats.[1]

A marked effect of the rate-making practices of the railroads during this period was the tendency of the milling industry to become concentrated near the wheat-fields. Freight rates on equal quantities of flour and wheat were kept almost equal, and it was more profitable to transport the finished product than the raw material. A comparison of the relative volume of the receipts of flour and wheat at

TABLE 25.—*Flour and wheat traffic of the St. Mary's Falls Canal, 1860-1899.*

Year.	Flour.	Wheat.
	barrels.	*bushels.*
1860	50,250	....
1870	33,548	49,700
1880	523,860	2,105,920
1890	3,239,104	16,217,370
1899	7,114,147	58,397,335

Buffalo shows the growth of the milling industry in the West. From 1877 to 1888, of the total receipts of wheat at Buffalo, only 22 per cent consisted of flour, but during the next decade 42 per cent of the receipts were in that form. Minneapolis became the greatest milling center in the world, its output of flour rising to more than 15,000,000 barrels annually by the end of the century.[2] Duluth and Superior together were manufacturing over 3,000,000 barrels, and St. Louis, Milwaukee, Chicago, and Toledo were each producing more than 1,000,000 barrels a year.

Another important surplus cereal belt was developed in the three Pacific States. From the time of its settlement the State of California became an important wheat-producing State, and in Washington and Oregon also this cereal became the staple agricultural product. The product of those three States provided most of the flour for domestic consumption in the western section of the country and also gave a large surplus for exportation. Between 1880 and 1900 about one-fourth of the exports of wheat and one-seventh of the exports of flour of the United States went from the Pacific ports.[3]

The most important center of rice production shifted after 1880 from South Carolina to Louisiana. In 1860 the former State produced two-thirds of the total amount raised in the United States, but the industry languished after the war. Until extensive cultivation was begun in Louisiana the total product of the country remained small, but by 1900 it had risen to 250,000,000 pounds in the continental

[1] *Monthly Summary of Commerce and Finance, Jan. 1900*, pp. 1964, 1965.
[2] *Ibid.*, 2014. [3] *Ibid.*, 1984.

›rtion of the United States. Two-thirds of this was raised in Louis-na and about one-fifth in South Carolina. New Orleans was the ost important domestic market.

LIVE-STOCK AND ANIMAL PRODUCTS.

The extension of the railroads to the grazing-lands of the West and ıe rapid increase of corn production in the Mississippi Valley after l60 gave a great impetus to live-stock raising. Like the trade in 'ain, the trade in live-stock centered in cities so located as to be ithin easy reach of the producing sections and the regions of con-ımption. To these primary markets the railroads carried thousands ' carloads of stock. The horses and mules were distributed among ıe farms and cities of the East and South; while the cattle, hogs, and ıeep were sent to the large primary markets either to be slaughtered ıere, or to be distributed thence among the farms of the Central :ates to be fattened for killing or to be shipped to the slaughter-›uses in the eastern cities.

TABLE 26.—*Receipts and shipments of live-stock at St. Louis, 1870, 1880, 1890, 1900.*

'ear.	Receipts.				Shipments.			
	Cattle.	Sheep.	Hogs.	Horses and mules.	Cattle.	Sheep.	Hogs.	Horses and mules.
1870	201,422	94,477	310,850	....	129,748	11,649	17,156	....
1880	424,720	205,969	1,840,684	46,011	228,879	93,522	770,769	44,416
1890	639,014	358,496	1,359,789	82,071	361,705	251,728	665,471	79,030
1900	795,800	434,133	2,156,792	169,082	207,998	65,199	513,561	147,463

Until 1863 Cincinnati was the chief meat-packing city of the country, ıt in that year Chicago took the lead, and as the live-stock industry ıoved westward, St. Louis, Kansas City, Milwaukee, Indianapolis, maha, and St. Joseph in turn surpassed Cincinnati in this business. he trade in meat was revolutionized in the early seventies by the :rfection of chilling and refrigerating processes that made possible the ıipment of fresh meats for long distances. Previous to this time the ıeat trade, with the exception of local business, was confined to salted ıd pickled meats, and eastern cities secured their supplies of fresh meat ıly by importation of live animals. The introduction of the refrigera-›r car caused a rapid growth of the trade in dressed beef and mutton : the packing centers in the Central States, and a coincident relative :cline in the east-bound shipments of live-stock, a condition that was ırther accentuated by the fact that the railroads imposed relatively gher rates on live-stock than on meat products shipped to the tlantic coast.

The statistics of the live-stock movements at St. Louis for a number of years, shown in table 26, typifies the great development of the trade.[1]

The volume attained by the live-stock trade is indicated in table 27, which shows the receipts and shipments at the principal primary markets in 1900.[2]

TABLE 27.—*Receipts and shipments of live-stock at principal primary markets, 1900.*

RECEIPTS.

City.	Cattle.	Calves.	Hogs.	Sheep.	Horses and mules.	Total.
Chicago	2,729,046	136,310	8,109,064	3,548,885	99,010	14,622,315
Kansas City	1,969,718	113,077	3,094,139	860,449	103,308	6,140,691
Omaha	828,204	....	2,200,926	1,276,775	59,645	4,365,550
St. Louis	795,800	....	2,156,972	434,133	169,082	3,555,987
St. Joseph	379,967	10,414	1,678,520	390,308	13,497	2,472,706
St. Paul	176,172	44,509	500,415	489,574	26,778	1,237,448
SHIPMENTS (BY RAIL).						
Chicago	934,649	14,006	1,452,183	487,254	91,703	2,979,795
Kansas City	853,303	64,197	223,963	216,272	87,787	1,445,522
Omaha	274,479	....	36,996	552,234	54,845	918,554
St. Louis	207,998	....	513,561	65,199	147,463	934,221
St. Joseph	85,847	6,154	83,044	103,440	12,181	290,666
St. Paul	134,645	19,698	45,158	403,924	24,723	628,148

The difference between the receipts and shipments at these markets indicates the extent of their slaughtering and meat-packing industries. The total value of the products of wholesale slaughtering and meat-packing in the United States in 1900 amounted to $700,000,000, of which more than half was produced in three cities—Chicago, Kansas City, and South Omaha. The hogs packed in all western cities in 1900 numbered 22,201,000. In Chicago alone, 1,814,921 cattle and 7,364,859 hogs were packed.[3] The chief market for the numerous products of the large packing establishments was in the manufacturing districts of the East. The eastward rail shipments of provisions from Chicago in 1900 averaged about 20,000 tons a week.[4]

The same forces that stimulated the stock-raising and meat-packing industries—the necessity of providing food for a large non-agricultural population and the desire of the farming interests to convert their grain into a form that would be marketed most profitably—led to an extensive development of the dairy business and a large trade in milk, butter, and cheese.

In all the States having a large urban population many dairy farms were established to supply the immense quantities of fresh milk con-

[1] *Monthly Summary of Commerce and Finance, Feb. 1900*, p. 2300; *Ibid.*, Dec. 1910, p. 994.
[2] *Ibid.*, Dec. 1910, p. 994. [3] *Report of Board of Trade of Chicago, 1901*, p. 44.
[4] *Monthly Summary of Commerce and Finance, March 1901*, p. 2089.

sumed each day in the cities. In the Northern States in particular, where the growth of manufacturing caused a greater density of population, there was a rapid growth of the milk trade.

In the corn-belt the business of making butter and cheese for local and eastern trade made a great advance. Over 800,000,000 pounds of butter and more than 133,000,000 pounds of cheese were made in the Northern Central States in 1899, the leading States being Iowa and Wisconsin.[1] The receipts and shipments of butter at Chicago, the most important interior market, grew as shown in table 28.[2]

TABLE 28.—*Receipts and shipments of butter at Chicago, 1870, 1880, 1890, 1900.*

Year.	Receipts.	Shipments.
	lbs.	*lbs.*
1870	11,682,348	11,049,367
1880	67,337,044	59,970,601
1890	140,548,850	156,688,837
1900	244,385,190	208,536,699

The trade in poultry and eggs also took on large proportions during this period. The introduction of commercially valuable incubators and the use of cold storage were important factors in the development of poultry and egg production. The trade in these products was heaviest in the cities of the corn-belt, from which more than half of the total output came. In 1900 Chicago received nearly 75,000,000 dozens of eggs,[3] half of which were shipped to eastern cities.

The output of wool in the United States in 1899 was 277,000,000 pounds,[4] about five times the quantity produced in 1860. The sheep-raising industry shifted largely to the Rocky Mountain States after 1880, over half of the wool clip of 1899 coming from that section.[5] The ultimate market of practically the entire product of wool lay in New England, Pennsylvania, and New York, where the woolen mills remained concentrated. The wide separation between the chief producing and consuming centers necessitated a transcontinental movement and gave the wool trade a position of some importance in internal commerce. The entire output was never sufficient to satisfy the home demand and large quantities were annually imported to supplement the domestic supply.

COTTON.

Of the economic disturbances occasioned by the Civil War none was more trying than that caused by the prostration of cotton cultivation and the disruption of the foreign and domestic cotton trade. Of the

[1] *Statistical Abstract of United States, 1911*, p. 151.
[2] *Report of Board of Trade of Chicago, 1901*, p. 104.
[3] *Ibid.*, 101.
[4] U. S. Census 1900, *Agriculture*, I, ccxi.
[5] *Ibid.*, 673.

economic problems facing the country at the close of the war none was of greater magnitude than that of rehabilitating the cotton-raising industry. Burdened by the evils of political reconstruction, hampered by the suddenly transformed system of labor, and oppressed by the general financial and industrial ruin resulting from the costly struggle, it was little less than remarkable that the Southern States were able, within five years after the conflict ended, to bring the total production of their great staple up to the point it had reached in 1860. But notwithstanding the obstacles and difficulties that existed, the cotton crop of 1870 was slightly greater than that of 1860, and in 1877 the total product was the largest ever harvested in a single year up to that time. From that year until the end of the century the volume of cotton production steadily increased. The geographical limits of the cotton-belt, which were fixed by climatic conditions, had been reached before 1860, and consequently there was no further extension; but the cotton acreage within this region was increased from about 13,000,000 to more than 25,000,000 acres.[1] Texas, the leading State in 1900, had over 7,000,000 acres devoted to cotton-culture, producing a crop of 3,300,000 bales, and seven more of the thirteen States in the cotton-belt each had an acreage of more than 1,000,000.[2]

The manufacture of cotton cloth in the United States during this period grew at almost the same rate as cotton production, about one-third of each annual crop after 1865 being required for domestic mills. The total consumption of domestic cotton increased from 927,000 bales in 1859 to 3,632,000 bales in 1899.[3] For a number of years most of the cotton manufacture was confined to the Northern States, but following 1885 there was a rapid growth of the textile industry in the cotton-belt itself, and by the close of the century the consumption of cotton in Southern millls was equal to about three-fourths of the consumption in the mills of the North.

The internal trade in cotton during this period possessed four features which may be considered separately: (1) the concentration of cotton at interior points; (2) the movement to southern seaports; (3) the overland movement to northern markets; (4) the consumption by southern mills.

In the ante-bellum days, before railroads became a factor in the transportation of cotton, the only interior points of concentration of importance were several cities, virtually all on navigable streams leading to the Gulf or Atlantic coast. Some of the largest of these interior markets were Atlanta, Memphis, Shreveport, Vicksburg, Montgomery, Augusta, and Columbia. The development of a comprehensive system of railways in the cotton-belt, however, permitted many other inland

[1] *Statistical Abstract of United States, 1911*, p. 142; *Monthly Summary of Commerce and Finance, March 1900*, p. 2548.

[2] *Statistical Abstract of United States, 1911*, pp. 138–142. [3] *Ibid.*, 740.

cities to share in the cotton trade. Moreover, the railroads succeeded in securing the greater portion of the cotton traffic, even in regions where water transportation was available, and the river ports lost or maintained their prominence according to the advantage they possessed as railway centers. The most important of the interior markets in 1898 were Houston, St. Louis, Memphis, Augusta, Cincinnati, Atlanta, Little Rock, Montgomery, Shreveport, and Dallas.[1] Each of these cities was the focal point of numerous railroads running through productive portions of the cotton-belt. The city of Houston, through which passed a large part of the Texas cotton destined for exportation from Galveston, had the heaviest receipts, amounting to 1,768,000 bales. St. Louis and Cincinnati owed their prominence to the fact that they were the natural gateways through which cotton passed to northern markets from Texas and the lower valley of the Mississippi. In addition to the cities named there were at least 20 other interior points each handling from 10,000 to 100,000 bales a year. The combined receipts at all 30 markets comprised 55 per cent of the cotton crop for the year.

The movement of cotton from the interior to the southern seaports underwent a change during this period, due likewise to the influence of the railroads. It has already been told how the railroads extending from Savannah and Charleston had caused a decline in the relative importance of New Orleans in the cotton trade before 1860. After the war this diversion to the eastern ports continued, and the increase of the overland movement also injured the relative standing of New Orleans. However, New Orleans, too, became an important railroad center, and the geographical position of the city enabled it to maintain its position as the leading market until 1899, when Galveston took first place because of the enormous increase of cotton production in Texas, of which this city was the chief market. New Orleans and Galveston together shipped about nine-tenths of the cotton exported by way of the Gulf of Mexico, the receipts at Mobile declining to a point below what they had been in 1860. On the Atlantic coast Savannah continued to hold the lead in cotton receipts. At Charleston the receipts advanced steadily till 1881, after which they declined in volume. Norfolk and Wilmington, of relatively small importance before the war, became important markets during this period, the former ranking next to Savannah after 1880. Table 29 shows the receipts at these various ports for a number of years.[2]

The overland all-rail movement of cotton, which began about 1855, developed to large proportions after the war. Before this movement began practically all the cotton not consumed in the South was sent to southern seaports, whence it was shipped abroad directly or was carried by coastwise vessels to northern ports for exportation or dis-

[1] *Monthly Summary of Commerce and Finance*, Jan. 1901, p. 1659. [2] *Ibid.*, Mar. 1900, p. 2595.

tribution among the cotton mills. The growth of the overland movement represented the result of the efforts of the railroads to secure a share of the cotton traffic that had formerly belonged entirely to the coasting trade. So successful were the railroads in the competitive struggle that by 1899 the coastwise movement was only a third larger than the all-rail movement. The overland cotton traffic originated in all the cotton States and most of it went through St. Louis or gateways on the Ohio and Potomac Rivers to the North Atlantic States

TABLE 29.—*Bales of cotton received at principal ports, 1860, 1870, 1880, 1890, 1899.*

Port.	1860	1870	1880	1890	1899
Galveston	252,000	246,000	480,000	860,000	2,344,000
New Orleans	2,139,000	1,142,000	1,504,000	1,973,000	2,231,000
Mobile	843,000	306,000	358,000	261,000	452,000
Savannah	525,000	488,000	741,000	956,000	1,099,000
Charleston	510,000	246,000	464,000	327,000	375,000
Wilmington	41,000	59,000	78,000	134,000	291,000
Norfolk	56,000	203,000	590,000	404,000	691,000

to be sold to eastern spinners or exported from New York, Boston, Philadelphia, or Baltimore. A considerable quantity of the cotton purchased by Canada reached the border by rail, and in the latter part of the century the growth of cotton exports to Japan gave rise to heavy rail movements to the seaports on the Pacific coast. The increase of the overland movement of cotton from 1857 to 1898, as compared with the coastwise movement, is shown in table 30.[1]

TABLE 30.—*Shipments of cotton, all-rail and coastwise, 1857-1899.*

Year.	Overland movement.	Percentage of total coastwise and overland.	Coastwise movement.	Percentage of total coastwise and overland.
	bales.		*bales.*	
1857	9,264	1	760,537	99
1877-78	693,640	19	1,620,495	81
1887-88	971,702	30	2,258,875	70
1898-99	1,370,398	40	2,019,153	60

The cotton mills of the South, the number of which increased remarkably during this period, secured most of their supplies from local planters. The chief results of the local consumption were the enhanced profits of the producers in the neighborhood of the cotton mills and the stimulating effect of the added competition on the level of prices. Only in the States situated in the northern portion of the cotton-belt—Tennessee, Virginia, and North Carolina—were the

[1] *Monthly Summary of Commerce and Finance, Mar. 1900*, p. 2567.

acturers compelled to purchase a considerable amount of their iaterial from beyond their own State boundaries. In South ia, Georgia, and Alabama less than 3 per cent of the mill con- ion of cotton in 1899 was taken from other States. In some :es the cotton trade of certain points was reduced, the decline orts from Charleston being due largely to the fact that the mills th Carolina developed, until they consumed nearly half of the . crop of the State.

OTHER FARM PRODUCTS.

ugh there were no other farm products, the internal movements :h approached in value the traffic in grain or live-stock or cotton, vere many others that were important factors in internal trade. Southern States bought large amounts of hay from the North, ticle forming an important item in the southbound river and rail in the Mississippi Valley. In all the cities of the North, and illy in those having a heavy trade in live-stock, there was a large d for hay, which in the early part of this period was usually sup- y local farms; but as cities grew larger and the demand greater, Eastern States purchased hay from the trans-Mississippi States. iy traffic of the railroads in 1900 amounted to 4,000,000 tons.

of the most interesting trade developments of the period was in stward shipment of fruits from California. The first shipment ade in 1867, and in 1899 the traffic amounted to 193,000,000 ;, 95 per cent of which was carried in refrigerator cars. The :nt of fresh vegetables and fruit from the warmer Southern States oarts of the North during the months of winter and early spring io an important feature of the internal trade of these years.

increasing production of all kinds of vegetables and orchard led to a large commerce in these articles. The potato crop of iited States in 1899 was valued at $98,000,000, and the sweet- crop at $20,000,000. The crop of apples amounted to o,000 bushels, New York, Pennsylvania, and Ohio raising over ,000 bushels each. Many of the vegetable and fruit crops were sis of large canning industries. The products of preserving and g in the United States in 1899 were valued at $56,000,000, :h half came from California, New York, and Maryland.

ng other agricultural products, the most valuable was tobacco, :h the States of Kentucky and North Carolina had the largest Louisville becoming the largest leaf-tobacco market in the world. ına possessed a large trade in cane sugar, most of which was ited from New Orleans. The different varieties of grass seeds nportant articles of trade, especially among the Central States, e flaxseed of the Dakotas, Minnesota, Iowa, and Kansas formed :able source of income for the farmers there.

COAL.

Under modern conditions the industrial development of a nation is largely a question of fuel, and to the abundance of the coal-supply may be ascribed in a large measure the great increase in manufacturing and the rapid growth of the railroad mileage of the United States after 1860. However, fuel derives its importance only from the existence of opportunity for its utilization, and it may be said with equal truth that the great demand created by the development of manufacturing and transportation was the chief cause of the tremendous growth of the consumption of coal and the most important factor in the remarkable development of the coal-mining industry and the coal trade. However these various factors may be classified into causes and effects, the fact remains that at the end of the century coal-mining was by far the greatest of the mineral industries of the United States, and the shipments of coal constituted a greater tonnage than all other commodities entering into internal trade combined.

Lack of statistics makes it difficult to trace the development of the internal commerce in coal during this period, but the growth of some of the most important movements from producing to consuming centers may be indicated. The trade in anthracite coal is comparatively easy of description because of the fact that the entire commercial product came from a relatively small area in eastern Pennsylvania. In the case of the bituminous-coal trade only the general trend of the movement from the most important fields can be shown.

Previous to 1860 practically all the anthracite coal shipped from the mining district was transported by water and short rail lines to Philadelphia and New York, where it was consumed or carried coastwise to various points along the Atlantic seaboard. This eastward movement continued to constitute the largest part of the anthracite trade after 1860. The railroads, however, took practically the entire business from the canals, and a large part of the distribution to points north and south of New Jersey was also accomplished by the railroads instead of by coasting vessels from New York and Philadelphia. The desirability of hard coal as a fuel, however, stimulated a demand for it in the Central States and a considerable trade sprang up toward the west, about a fifth of the total annual output being carried in that direction at the end of the century. The chief route for this traffic was by canal or rail to Buffalo, whence it was distributed by lake vessels to points in Ohio, Michigan, Illinois, Wisconsin, and Minnesota. The receipts of anthracite coal at Buffalo in 1898 amounted to 4,225,000 tons, of which more than one-half was shipped away by lake,[1] over 1,000,000 tons being destined for Chicago; 500,000 tons for Milwaukee, and 500,000 tons for Duluth-Superior.[2] The other important

[1] 20th Annual Report United States Geological Survey, VI, *Metallic Products, Coal and Coke*, 368.
[2] *Monthly Summary of Commerce and Finance*, *Apr. 1900*, p. 2853.

restward movement was to Pittsburgh, large quantities being shipped hither for local trade and distributed westward by rail. The fact hat St. Louis in 1898 received 225,000 tons and Chicago 526,000 tons f anthracite coal by rail[1] showed the importance of the long-distance ail traffic in this commodity.

Until the early sixties the production of bituminous coal in the Jnited States was less than that of anthracite, and the latter variety ras sold to the consumer at a lower price. When large amounts of coal egan to be used in the iron industry, however, the great abundance f bituminous and the wider area in which it was found caused its olume of production to increase more rapidly, and by 1900 the annual utput was three and a half times that of anthracite. The tendency f industries which consumed most of the soft coal to gravitate toward he mining district, the wide extent of the region over which soft coal ras found, and the relatively high cost of transportation as compared o value, lessened the possibility of a large amount of extremely long-istance traffic in this fuel. Consequently, though soft coal furnished nost of the freight tonnage of the country, a relatively small part f the shipments were for such long distances as other raw materials, uch as grain and cotton, were carried. Nevertheless the demand for uel in cities not located near coal-bearing regions and the consumption f soft coal by railroads created a large and exceedingly valuable coal rade for the highly productive mining localities.

The great fields in Pennsylvania, West Virginia, Maryland, and Ohio produced considerably more than half the bituminous coal mined n the United States between 1860 and 1900. From this region there rere heavy shipments in all directions. The Chesapeake and Ohio Canal and the southern trunk-line roads carried a large tonnage to the ities on the Atlantic seaboard;[2] millions of tons were floated down the Ohio River to Cincinnati, Louisville, and points below; the railroads ook immense quantities westward for consumption among the cities f the Central States and for lake transportation from all important oints on the southern shore of Lake Erie. The lake coal trade became specially heavy because of the absence of coal deposits in the region round Lake Superior, and because the large shipments of iron ore from uch points as Duluth and Superior made possible low freight rates on eturn cargoes of coal.

The second large center of the bituminous-coal trade was in the elds of Illinois, Indiana, Iowa, Missouri, and Kansas. From these tates came most of the soft coal consumed in the numerous manufacuring cities north and west of Louisville,[3] and the coal supplies of the outhwest were also drawn from this region. The third center of oft-coal production, which had a period of very rapid development

[1] 20th Annual Report U. S. Geological Survey, VI, *Metallic Products, Coal and Coke*, 374, 384.
[2] *Monthly Summary of Commerce and Finance, Apr. 1900*, p. 2855. [3] *Ibid.*, 2860–2866.

after 1885, was the Alabama and Tennessee field. It provided fuel for the growing manufacturing industries of the Southeast and competed to some extent with the northern mines for the coal trade of points in the lower valley of the Mississippi.

IRON ORE, IRON, AND STEEL.

The development of the movement of iron ore from the ranges around Lake Superior to the furnaces of the Eastern States was one of the most interesting features of the internal commerce of the United States during this entire period. This was the only movement of iron ore that attained large dimensions. The close proximity of a coal-supply to the iron mines of the Appalachian district made possible the smelting of the ore of that region in the immediate vicinity of the mines, and consequently a heavy internal movement of the ore produced in that section was unnecessary. Of the iron ore produced in the Lake Superior district very little was smelted in the States where it was mined, practically all of the enormous output being conveyed by lake vessels to ports on Lake Erie and Lake Michigan to be converted into pig iron and steel in the blast furnaces of Pennsylvania, Ohio, New York, and Illinois. The magnitude of this trade is shown by the fact that from 1870 to 1880 one-fourth, from 1880 to 1890 more than one-third, from 1890 to 1895 more than one-half, and from 1895 to 1900 more than two-thirds of all the iron ore mined in the United States was shipped eastward from the Lake Superior district. The growth of these shipments, as compared to the growth of the production of iron ore in the United States, is shown in table 31.[1]

TABLE 31.—*Iron ore production in the United States, 1870, 1880, 1890, 1899.*

Year.	Production of iron ore in the United States.	Shipment of iron ore from the Lake Superior district.
	long tons.	*long tons.*
1870	3,031,891	859,507
1880	7,120,362	1,987,598
1890	16,036,043	9,003,725
1899	24,683,173	18,251,804

No industry in the United States had a more remarkable growth after 1860 than the iron and steel industry. Table 32 shows the increase in the production of pig-iron and steel from 1870 to 1900.[2]

The increase in the output of pig-iron was especially rapid between 1885 and 1890, during which time the annual amount produced doubled in volume. The most important period in the steel industry was the decade following 1890.

[1] *Monthly Summary of Commerce and Finance*, Aug. 1900, pp. 202, 206, 220.
[2] U. S. Census 1900, *Manufactures*, IV, 28, 74.

Of the development of the internal trade in iron and steel it is impos-
ole to give accurate details, though some idea of the consumption roughout the entire country may be given, and the chief centers of oduction may be indicated. Practically every State east of the ississippi and several of those west produced more or less pig-iron d steel during this period. However, there were four States that ood out most prominently in the industry. Pennsylvania con-
.buted about one-half of the entire output of both iron and steel dur-
g the whole forty years. Ohio ranked next to Pennsylvania, being e only other State before 1890 to produce more than 1,000,000 tons pig-iron a year. In the other two States, Alabama and Illinois, e pig-iron industry began to expand rapidly in the early eighties, and ' 1900 the annual output of these two States comprised more than e-fifth of the total product of the country.[1] In Illinois the pro-
iction of steel also developed rapidly; but Alabama, though turning t 1,203,000 tons of pig-iron in 1900, manufactured only 48,000 tons steel.

TABLE 32.—*Iron and steel production in the United States, 1870, 1880, 1890, 1900.*

Census Year.	Pig-iron.	Crude steel ingots and castings.
	gross tons.	*gross tons.*
1870	1,832,876	[1]28,069
1880	3,375,912	1,027,381
1890	8,845,185	4,174,652
1900	14,452,185	10,685,000

[1]U. S. Census 1870, *Industry and Wealth*, 625.

The immense output of the iron and steel mills was sold everywhere roughout the country. A large quantity of it, in the form of rails, ent to build the great mileage of railway track constructed in every ate; the remainder was used as the raw material for manufactures of great variety of iron and steel products that were used in all branches mining, agricultural, and manufacturing industries. Practically the tire domestic product of iron and steel was consumed at home. ntil 1895 the annual value of the exports of both iron and steel and e products manufactured from them was less than $30,000,000.

OTHER MINERALS.

Of the non-metallic minerals, other than coal, petroleum was by far e most important. The crude petroleum produced in the United ates in 1900, amounting to 64,000,000 barrels, came chiefly from the ppalachian and the Lima-Indiana fields.[2] Ohio, West Virginia, and

U. S. Census 1900, *Manufactures*, IV, 33–34.
Statistical Abstract of United States, 1911, p. 223; 20th Annual Report of United States ological Survey, VI, *Non-Metallic Products*, 6.

Pennsylvania together produced 52,000,000 barrels, Indiana 4,800,000, New York 1,300,000, and the only other State producing more than 1,000,000 barrels annually was California. Most of the crude oil of the two large eastern fields was conveyed in pipe-lines to the refineries of Pennsylvania, New York, New Jersey, and Ohio[1] to be converted into various finished products that occupied an important rank among the commodities entering foreign and domestic commerce.

Among the other non-metallic minerals were many varieties of stone. The marble of Vermont and Georgia, the granite of Maine, Massachusetts, and New York, the limestones of Pennsylvania, New York, Ohio, Indiana, and Illinois, the slates of Pennsylvania and Vermont, and the sandstones of Ohio formed the largest part of the $36,000,000 worth of stone produced in 1900 and distributed over the country. Large quantities of Portland cement were shipped from factories in Pennsylvania, New York, and Ohio. The phosphate rock of Florida, South Carolina, and Tennessee constituted an important part of the domestic and foreign trade of those States. 20,000,000 barrels of salt were produced in 1900, the leading centers being New York, Michigan, Kansas, and Ohio. The natural-gas fields were located in the same States in which petroleum was found in large quantities, and gas was piped to nearly all the large cities between New York and Chicago to be consumed in factories and homes.

Of the metallic minerals, other than gold and silver, the most valuable was copper. The production of this metal grew from 7,200 tons in 1860 to 270,000 tons in 1900.[2] The three important mining districts in 1900 were Montana, Arizona, and the Lake Superior district, these three regions producing 475,000,000 pounds. Until 1882 the Lake Superior district contributed over three-fourths of the copper mined in the United States, but thereafter this field declined in relative importance though increasing its total output.[3] Practically all of the copper ore was smelted in the locality of the mines and the metal shipped to the refineries in the Eastern States to be worked up into useful forms. Over 32 per cent of the refining in 1900 was done in New Jersey.[4]

FOREST PRODUCTS.

In 1900 there were five large lumber-producing regions in the United States, commercially distinct from one another because of location or difference in the character of product, ranking as follows in order of the volume of output: (1) The southern region, made up of Oklahoma,

[1] U. S. Census 1900, *Manufactures*, IV, 684.
[2] *Statistical Abstract of United States, 1911*, p. 735.
[3] 20th Annual Report of United States Geological Survey, VI, *Metallic Products, Coal and Coke* 160.
[4] U. S. Census 1900, *Manufactures*, IV, 140.

Texas, Louisiana, Arkansas, and all the States east of the Mississippi and south of the Ohio and Potomac Rivers, except Kentucky and Tennessee; the chief timbers of this section were the longleaf and the shortleaf yellow pine and cypress; (2) the lake region, including Wisconsin, Michigan, and Minnesota, with white pine and hemlock as the characteristic woods; (3) the Central States (Illinois, Indiana, Kentucky, Missouri, Ohio, Tennessee, and West Virginia), forming the great hardwood belt; (4) the northeastern region, embracing the New England and Middle Atlantic States, with the spruce, pine, and hemlock of Maine, and the pine, hickory, and oak of the Middle States as the principal timbers; (5) the Pacific States, important for their large area of redwood, fir, cedar, and pine.[1] The lumber production of these five districts, amounting to more than 34,000,000,000 feet, together with shingles, naval stores, and other forest products, contributed a large volume of material to the internal commerce of the nation, the lumber tonnage of the railroads being greater than the tonnage of any other commodity except bituminous and anthracite coal.[2]

The principal feature of the internal trade in forest products between 1860 and 1900 was its rapid development in the great central region extending from the Great Lakes to the Gulf States. Before 1860 the Lake region had assumed a prominent place as a lumber-producing center, and in addition to supplying a large quantity of material for the construction operations of all kinds in the Central States, it was producing a heavy surplus of boards and staves which were shipped by lake to Buffalo to be distributed eastward. The development of manufacturing and transportation after 1860, the growth of cities, and the settlement of farming regions caused a continually increasing demand for forest products and a rapid exploitation of all the timber resources of the Central States.

By 1880 the three Lake States formed the most important lumbering center in the country, a position which they held till near the end of the century; Michigan was the leading State for more than a score of years. The chief primary market was Saginaw, where the production of white-pine lumber alone in 1882 amounted to nearly 900,000,000 feet.[3] As the pine forests of Michigan disappeared, the lumber industry of the Lake district shifted westward and Minneapolis and Duluth became the most important primary markets.[4] From the three cities just named and many other points in the Lake region the sawed lumber, lath, and shingles were shipped by water and rail to such points as Chicago, St. Louis, Detroit, Cleveland, and Buffalo for local consump-

[1] *Statistical Abstract of United States, 1911*, pp. 160–167; *Monthly Summary of Commerce and Finance, Nov. 1900*, p. 1084.
[2] *Statistics of Railways in the U. S., 1900*, p. 65.
[3] *Monthly Summary of Commerce and Finance, Nov. 1900*, p. 1128. [4] *Ibid.*, 1129, 1132.

tion and distribution. Table 33 gives statistics of the receipts and shipments of lumber and shingles at Chicago and affords an index of the volume of trade.[1]

TABLE 33.—*Receipts and shipments of lumber and shingles at Chicago, 1860, 1870, 1880, 1890, 1900.*

Year.	Lumber.		Shingles.	
	Receipts.	Shipments.	Receipts.	Shipments.
	M feet.	*M feet.*	*M feet.*	*M feet.*
1860	262,494	225,372	127,894	168,302
1870	1,018,998	583,490	652,091	666,247
1880	1,561,779	925,682	649,546	134,375
1890	1,941,392	812,655	515,575	108,822
1900	1,596,746	769,451	338,488	244,276

In the Northern Central States there was a development of the manufacture of vehicles, agricultural implements, furniture, and other wood products, in which a large part of the hardwood timber of that district was consumed. A large share of the cross-ties and heavy lumber used by the railroads was also supplied by the oak forests of this region. The greater relative value of cleared land hastened the deforestation of much of the region north of the Ohio River, and at the end of the century many of the wood industries depended for raw material on hardwoods shipped from Kentucky, Tennessee, and Alabama, for which Cincinnati was the leading distributing center.

Until after 1880 the timber resources of the States of the lower Mississippi Valley were developed slowly, but as the forests of the Lake region and the Northern-Central States were cut away, the manufacturing districts of the North began to draw heavily upon the yellow-pine forests of the South. The result was seen in the rapid expansion of lumber production in such States as Arkansas, Mississippi, Louisiana, and Texas, each of which was producing more than 1,000,000,000 feet of lumber in 1900, a greater quantity than the combined output of all four States in 1880. The principal distributing center of the north-bound internal shipment from the yellow-pine district was St. Louis. The lumber receipts at this city in 1899, composed chiefly of yellow pine, amounted to 1,100,000,000 feet.[2]

The internal movement of lumber along the Atlantic and Gulf coasts consisted largely of shipments from the forests and mills to the seaports, the interstate traffic being cared for to a large extent by the coasting trade. Practically every port from Baltimore to Jacksonville was an important market for lumber sawed in the South Atlantic

[1] *Report of Board of Trade of Chicago, 1901*, p. 104.
[2] *Monthly Summary of Commerce and Finance, Nov. 1900*, p. 1147.

States, and the Gulf ports also collected large quantities of other southern forest products for coastwise and foreign commerce. An important part of the trade in forest products in the southern region was in naval stores, of which the yellow pine yielded a large and valuable supply. In the northeastern region the spruce timber of New York, Maine, and New Hampshire formed the basis of an extensive trade in wood-pulp.

The large timber resources of the Pacific States began to be developed on an extensive scale in the eighties, the total production of 2,000,000,000 feet in 1890 being 3½ times the product of 1880. Until the completion of the Northern Pacific and Great Northern Railroads, California was the leading State, but in 1890 the output of Washington was equal to that of the other two States together. The centers of the lumber and shingle trade of this region were San Francisco, Portland, and the ports on Puget Sound. Until late in the century most of the commerce in forest products was confined to heavy coastwise shipments and a small foreign trade. However, reductions in freight rates on east-bound lumber led to the building up of a large inland trade. Thousands of carloads of shingles and building timbers were shipped to States east of the Rocky Mountains to compete with the white pine of the Lake district and the yellow pine of the South,[1] and the rapid rate of increase of this trade indicated that within a few years the area of competition was to spread farther and farther to the east.

PROGRESS OF MANUFACTURES.

The progress of manufacturing after 1860 was marked by a great augmentation of production, a continuance of the tendency to transfer household industries to shops and factories, a concentration of manufacturing within a relatively small section of the country, and a localization within that section itself of many of the various single industries. These factors, together with the expansion of the consuming powers of the nation and the development of the transportation system, furnished the basis of an enormous internal trade in manufactured products.

Table 34 shows the percentage of the total manufactures of the census years of this period produced in the various groups of States.[2]

It will be seen that in 1859 the New England and Middle States produced nearly three-fourths of the total manufactures, and that their share in 1899 was still more than one-half, while these two groups together with the Central States turned out more than eight-tenths of the total product of manufactures of each census year. In general it may be said that the rest of the country was dependent upon these sections for manufactured wares, and when one considers that most of the manufacturing in the South, with the exception of the textile

---

[1] *Monthly Summary of Commerce and Finance*, Nov. 1900, p. 1119.
[2] U. S. Census 1900, *Manufactures*, I, clxxv.

industries developed late in the century, consisted in converting cotton, forest products, and sugar into marketable form, that the manufacturing in the West was chiefly the smelting of minerals and sawing of timber, the enforced reliance of these sections upon the northeastern quarter of the country becomes still more evident. The fact that over one-half of the manufactured products of the United States in 1899 was produced in five States—New York, Pennsylvania, Illinois, Massachusetts, and Ohio—serves to designate still more closely the chief centers of trade in manufactured goods.

TABLE 34.—*Percentage distribution of manufactures by groups of States, 1860-1900.*

Region.	1860	1870	1880	1890	1900
New England States	27.8	23.8	20.6	16.0	14.4
Middle States	42.5	41.8	41.3	38.9	38.0
Southern States	10.3	6.6	6.3	7.5	9.1
Central States	18.1	24.9	28.0	31.4	30.7
Western States	0.4	1.1	1.4	3.0	4.3
Pacific States	3.9	1.8	2.4	3.2	3.3

The segregation of many large industries within the manufacturing belt itself was an important factor in determining the course of internal trade between the manufacturing States and the rest of the country and among the manufacturing States themselves, which were the largest consumers as well as the largest producers of manufactured goods. Of the products of the slaughtering and meat-packing industry, the trade in which has already been described briefly, over 67 per cent came in 1899 from Illinois, Kansas, Nebraska, and Indiana. Chicago alone contributed 35.6 per cent in 1889 and in 1899 the share of that one city was 45 per cent or nearly one-half of the entire product of the country. Pennsylvania manufactured over one-half of the entire quantity of iron and steel products of this period and a large proportion of the glass. The manufacture of agricultural implements moved westward with the development of the central grain belt, and in 1899 Illinois was credited with 41 per cent of the total product. The leather industry was largely centralized in Pennsylvania, Massachusetts, and New York, and of the boots and shoes manufactured and sold throughout the country Massachusetts produced approximately one-half. This State led also in the manufacture of cotton goods, turning out a third of the entire amount.

Of the 15 leading manufacturing cities in 1899, 12 were situated east of the Mississippi River and 2, St. Louis and Minneapolis, were situated on the banks of that river. All of these cities were the centers of a large amount of trade. New York City alone produced in 1899 over one-tenth of all the manufactures of the country; Chicago and Philadelphia together produced another tenth. These three cities,

in the order named, led all other cities in printing and publishing, in the production of men's and women's factory-made clothing, and in the manufacture of planing-mill products. They also led, though not in the same order, in foundry and machine-shop work and the manufacture of cigars and cigarettes.

GROWTH OF THE VOLUME OF INTERNAL COMMERCE.

The increase of the total value of the products of manufactures from less than $2,000,000,000 in 1859 to more than $13,000,000,000 in 1899 is an index of the growth of the internal trade in manufactured products. Of a total of 516,000,000 tons of classified freight transported by the railroads in 1900, manufactures furnished over 69,000,000 tons or 13.41 per cent of the total, a larger proportion than any other class of freight except products of mines, which formed more than one-half of the total traffic. In the territory north of the Ohio and Potomac Rivers and east of Illinois and Lake Michigan, manufactures constituted 16.52 per cent of the entire traffic,[1] and probably represented a much greater value than any other class of freight.

The distribution of imported merchandise from the seaports and other points where they enter the country, like the collection of merchandise intended for export at such places, forms an important part of the internal trade of any nation possessing a large foreign commerce and having a wide expanse of territory over which the imports must be distributed.

The annual value of the imports of the United States rose from $353,000,000 in 1860 to $850,000,000 in 1900. About one-third of the imports of the entire forty years consisted of food products in crude or manufactured state, among the most important of which were sugar, coffee, tobacco, fruit, and tea. Manufactures ready for consumption and manufactures and raw materials for use in the manufacturing industries of the United States made up practically all the remainder. A conspicuous feature of the importations was the decreasing proportion of finished manufactures, and the increasing proportion of raw materials, the latter class of imports being first in importance at the end of the period.

By far the largest part of the imports of the United States entered by way of New York. This city received 70 per cent of the total in 1860 and in 1900 its share was 60 per cent. Boston, Philadelphia, and Baltimore were the only other large importing centers on the Atlantic coast, but their receipts were small in comparison to those of New York. The imports at New Orleans reached an annual value of $20,000,000 only twice in the forty years, and usually they were less than $15,000,000. On the Pacific coast the increasing trade with Hawaii and nations of eastern Asia caused a steady growth of importations at San Francisco, their value rising from $7,000,000

[1] *Statistics of Railways in the United States, 1900*, p. 66.

in 1860 to $47,000,000 in 1900. The imports received at the northern border and Lake districts also formed an important part of the foreign trade and added to the internal trade of Chicago, Detroit, Buffalo, and other ports of entry in that region.

The best index of the growth of internal trade after 1860 was the vast increase in the freight tonnage of the railroads over which the largest part of the trade was conducted. In 1860 the total traffic originating on the railway lines of the country probably amounted to about 26,000,000 tons.[1] In 1900 the tonnage of railway traffic, exclusive of that received from connecting lines and other carriers, was 593,970,955.[2] The freight carried on inland waterways in 1860 was apparently about equal in amount to the railway traffic. In 1900 the traffic on inland waterways amounted to about 90,000,000 tons, of which 60,000,000 tons were carried on the Great Lakes, 28,000,000 tons on the Mississippi River system, and 2,000,000 tons on other rivers and canals.

Of the railroad traffic in 1900 about 87 per cent was classified by the Interstate Commerce Commission according to the character of freight and the territory of the lines on which it originated. Of the 516,432,217 tons thus classified about six-tenths originated in the territory north of the Ohio and Potomac Rivers and east of Illinois and Lake Michigan; one-eighth in the territory south of the Ohio and Potomac Rivers and east of the Mississippi River; and the remainder in the territory west of Lake Michigan, Indiana, and the lower Mississippi River. Products of mines made up 52.59 per cent of this classified tonnage; manufactures 13.41 per cent; products of forests 11.61 per cent; products of agriculture 10.35 per cent; merchandise 4.26 per cent; products of animals 2.87 per cent; and 4.91 per cent was classed as miscellaneous.[3]

SUMMARY.

A most interesting and significant feature of the history of the United States during this period was the transition in the character of the economic problems of the country. Until the time of the Civil War its chief problems had been those of securing the means to develop its resources, of acquiring the facilities to move its products from place to place, of providing markets in which its products could be sold. As capital, population, and transportation facilities were provided to perform the work of developing the latent wealth of the continent, it was discovered that from their presence grew far larger and more vital economic and political problems than their absence had ever created. The economic difficulties of the nation after the Civil War arose chiefly because of the existence of the things which before 1860 it was a question of acquiring.

---

[1] U. S. Census 1860, *Preliminary Report*, 105.
[2] *Statistics of Railways in the United States, 1900*, p. 67. [3] *Ibid.*, 66.

In no instance was this general proposition better demonstrated han in the railroad problem. For nearly sixty years of the nineteenth entury the chief obstacle to internal trade had been the lack of the neans of transportation. To overcome this difficulty the States had .rst built or aided canals and railroads. Many of the State enterprises ailing because of weak administration, the States had surrendered the nanagement of railroads to private corporations, but the public still hared in the work of railroad construction through the numerous ;rants of aid by Federal, State, and local governments. For a number f years almost the only activity of the public in regard to the railroads ras to foster and protect the interests of the railroad companies. In he seventies the public gradually came to realize that the railroad ompanies disregarded the interests of the public. Persons and comnunities found themselves at the mercy of railroad corporations, which, y discriminations in charges, built up and destroyed towns and had ower to control arbitrarily the economic future of sections of the ountry. Moreover, the railroad companies were instrumental in the reation of industrial combinations which were considered to be a nenace to the welfare of the general public. The transportation roblem of the United States was not alone that of providing facilities, ut also that of controlling and regulating the existing facilities in such . manner that reasonable rates and services would be given to the ublic that had intrusted the business of transportation to private gencies. Regulation was first exercised by State legislation. The tates being powerless to regulate the interstate trade, the National Government found it necessary to act, and in 1887 the interstate ommerce law was enacted, having for its chief purpose the prevention f unjust discrimination. As a regulative measure the law proved nadequate, and some important provisions were narrowed in scope by . series of decisions by the Supreme Court. The century ended with ailroad regulation but partially accomplished.

No less pressing than the problem of regulating the railroads over vhich the internal commerce of the nation was carried on was the juestion of regulating the great combinations of capital through which . large part of the buying and selling of the products of the country vere controlled. The unfair advantages secured by large combinations ecause of their abundance of capital and the discriminating favors of ailroads enabled them often to throttle competition and to create nonopolies that were a menace to the public. This situation brought bout the enactment of the Federal anti-trust act of 1890 intended to revent the monopolization of trade, but previous to 1900 but little pplication of the law had been made.

To the tariff and to the currency the nation owed its most bitter olitical struggles after the reconstruction of the Union was accomlished. Immediately after the war ended an agitation was begun or the downward revision of the tariff. In 1872 there was a horizontal

reduction of 10 per cent, but the old rates were restored in 1875 because of a falling off in revenue during the panic of 1873. In 1882 a national tariff commission recommended a 25 per cent reduction of the duties, but the protectionist influence was too strong to permit such a change. Slight reductions were made, however, in 1883, but in 1890 the McKinley act was passed, raising the level of rates higher than ever. The presidential campaign of 1892 was fought out on the tariff issue, and though the Democratic party, which championed revision, was victorious, it was able to make an average reduction of only about 10 per cent. The panic of 1893 was ascribed to the new tariff act, and when the Republican party returned to power in 1897 the Dingley act was enacted, raising the general average of duties to a point 10 per cent higher than it had been at the close of the Civil War.

The frequent disasters into which a poor monetary system had plunged the nation during the first ninety years of its existence would seem to have been sufficient incentive to cause the currency to be placed on a sound basis, but as a matter of fact the situation after the Civil War, with the exception of the improvement of the banking system, was in other respects worse than it had been before. The chief trouble arose because of the adoption of measures intended to satisfy insistent demands for a greater volume of money without making provisions for its retirement when business conditions were such as to warrant a contraction of circulation. A quarter of a century of struggle finally ended in the overthrow of the advocates of the unlimited coinage of cheap silver money, but no attempt was made before 1900 to remedy the inelasticity of the national currency or to check the tendency toward a concentration of the control of credit in a few financial centers. In 1873 and in 1893 the country suffered from money panics, the latter one being due almost entirely to unwise financial measures that had virtually bankrupted the Government and destroyed confidence in the money it issued.

The end of the century was reached with only a little headway made in the solution of the most vital economic problems. In striking contrast to the conditions of American industry, from 1830 to 1860, when there was neither much pauperism nor great riches, this period from 1860 to 1900 saw the development of both poverty and wealth, and furthermore, an ever-growing tendency toward the concentration of national wealth under the control of a few powerful interests. The disregard which some of these interests evinced for the welfare of the general public and the power which they possessed to thwart the attempts of the public to protect itself created the most serious question which confronted the nation. However, there was ample evidence that the national consciousness was beginning to take cognizance of much of the existing maladjustment and was awakening to a sense of duty long undone. In a quick and intelligent realization of the meaning of existing conditions lay the hope for the immediate future.

CHAPTER XVII.

ORGANIZATION AND MANAGEMENT OF INTERNAL TRADE.

Transportation and communication, 296. The express service, 298. The telegraph and postal services, 299. Functions and development markets and produce exchanges, 300. Federal and State banking, 303. First and second United States Banks, 304. Regulation of banks by the States and the consequences, 305. Development of corporations, 307. Evils resulting from lack of regulation, 309.

It is intended to present in this chapter a short account of the development during the nineteenth century of some of the more important commercial institutions and commercial practices by means of which the growth of the internal trade of the United States was facilitated and its operations given a greater degree of safety, certainty, and regularity. To give a history of all the changes in the methods and means employed by buyers and sellers to meet and transact their business and to describe in detail the exact manner in which the operations of commerce were carried on during the course of the century would require more space than can here be given to those topics. However, the number and importance of the innovations and modifications in the commercial processes of the nation render it necessary to give at least a brief survey of the history of the institutions, to the influence of which was due in a large measure the great transformation which took place in economic and commercial conditions.

TRANSPORTATION AND COMMUNICATION.

As regards changes in the field of transportation, enough has been said in previous chapters concerning the advance made in mechanical processes. Attention has also been called to the close relations that existed between the progress of internal trade and the evolution of the inland transportation system through the various stages of winding trail, inferior earth road, turnpike, canal, and railroad. No other single feature of the progress of the work during the nineteenth century was more significant than the improvement and development of "the inventions which abridge distance," and no country reaped greater benefits from the changes in the means of transportation than did the United States. To the continuous improvement of the methods of carrying goods from place to place, more than to any other single cause, was due the rapid progress of domestic trade. Space and time and the difficulties imposed by the physical features of the surface of the earth and the wide variety of climatic conditions were all overcome, and the operations of trade largely relieved of the burdens formerly imposed by elements of risk and chance.

An important advantage coming with the improved system of transportation was the possibility of securing through freight service over long distances, regardless of the number of carriers employed in the

movement. In the first part of the century few common carriers offered regular transportation service over long inland routes, and there were few instances where through routes and through rates were given by connecting carriers. A shipper sending a consignment of goods which had to be conveyed by several different carriers in turn was compelled either to accompany his shipment, or to employ an agent at the terminal of each route to take charge of his property and forward it to the next point of reshipment, until it reached its final destination. It was impossible to calculate in advance the cost of transporting freight for long distances, and the expense and delay occasioned by the necessity of providing for the special oversight of through traffic was a great burden to internal trade. Sellers of goods often provided their own means of transportation to distant markets and accompanied their shipments, and merchants at inland points usually made periodical trips to large cities, where they would lay in a large stock of goods sufficient to supply the needs of their trade for a considerable length of time.

The development of the railway freight service put an end to these difficulties of long-distance transportation. Before 1860 the elimination of the forwarding agencies was begun through the formation of the fast freight lines—companies organized especially for the purpose of caring for traffic passing over the lines of more than one railroad company. These freight lines provided their own cars and made arrangements with different railroads for hauling them, thus obtaining continuous service between distant points. Because of several abuses springing up in connection with the operations of these freight lines they were soon superseded, to a large extent, by cooperative lines, which were merely joint arrangements entered into by two or more connecting railroads, each supplying a definite share of the equipment for the through service. The final step in the direction of securing freedom of movement was the agreement of practically all the railroads of the country to permit the interchange of their freight-car equipment. The adoption of the system of car interchange marked the discontinuance of the organization of fast-freight lines, and even those which still existed at the close of the century had lost their former status, practically all of them having become company lines or freight bureaus of large railway systems which had been formed by the consolidation of the lines that had previously entered the joint traffic arrangement.

Thus at the close of the century it was possible for a shipper in any part of the United States to bill goods, either in carload or less than carload amounts, to a consignee in any other part of the country, receive a through rate on the shipment, and be relieved of all care of his property while it was in transit, regardless of the number of times it was transferred from the lines of one carrier to those of another. These benefits were at first given voluntarily by transportation agencies for the purpose either of attracting business or of meeting competition

and the public had become so accustomed to them that they were no longer regarded as favors growing out of considerations of a business nature, but as rights to be maintained and protected by legislative enactments.

It is impossible to estimate the beneficial effects on trade of the improvement in the system of caring for traffic. The speed and safety with which goods could be transported from one section of the country to another eliminated practically all the necessity of making allowance for an element of chance in trade calculations. Buyers of goods found it unnecessary to tie up a considerable portion of their business capital for the sake of keeping in possession a large stock of commodities, there being always a reasonable certainty that they could replenish a diminished supply within a short period of time. Furthermore, large amounts of capital were no longer locked up because of the excessive delay of goods in transit, and all business transactions could be carried on with more regularity and economy. Shippers found it possible to negotiate the bills of lading representing the property intrusted to carriers, and their operations were not hampered by the need of waiting for final settlement with consignees. A greater stability was given to prices, both because commodities could be moved freely and quickly, and because it was possible to calculate exactly the cost of transportation for any distance.

Another important development in the field of transportation was the express service, which was first started in 1839 by William Harnden, of Boston. Previous to the origin of this service, it had been customary to send money and small parcels by stage-drivers, steamboat captains, railway conductors, special messengers, or friends and acquaintances who happened to be journeying to the point where delivery was desired to be made. Harnden saw the need of a safe and more systematic service than such methods afforded, and he established a regular express business between Boston and New York, he himself receiving and carrying parcels between the two cities. The immediate success of his initial effort caused him soon to extend the service to other points, hiring agents and messengers to receive and care for the parcels, and making special contracts with railroad and steamboat companies for the transportation of his men and their traffic. The profitableness of his venture encouraged others to enter the field, and within a dozen years several companies were organized to give similar service over various sections of the country. By the end of the century the business had grown to immense proportions. Most of it became centralized in the control of a half dozen large companies, which in a general way divided up the country among themselves, thus protecting their business from the danger of loss arising from violent competition and insuring to all of them a large measure of profit. The service, which at first was confined to a high-class parcel traffic, became much more

comprehensive in its nature as time passed. Perishable commodities requiring careful transportation and speedy delivery became a part of the regular express traffic, valuable live-stock and shipments of machinery were handled, and in fact all kinds of packages, either large or small, upon which the shippers were willing to pay charges higher than those paid for railway freight service in order to secure more rapid and prompt delivery. Furthermore, the express companies developed a money-order and letter-of-credit service, an order and commission business, and a collecting service.

Of almost equal importance with the betterment of the transportation service given to the country was the improvement in the facilities for communication. The progress made in trade would have been impossible without the means for securing a more rapid dissemination of information; and the development of the steam railway itself to its high degree of efficiency could not have been accomplished had it not been for the invention of its great accessory, the electric telegraph.

As early as 1835 Samuel F. B. Morse perfected a mechanism for transmitting verbal messages along an electric wire. He was unable to interest business men in his device and endeavored to persuade Congress to grant him sufficient funds to establish an experimental line. He exhibited his invention before Congressional committees in 1838, and five years later he finally secured an appropriation of $30,000 for the construction of a line between Baltimore and Washington.[1] This line was put in operation in 1844, and it immediately demonstrated the practicability and enormous usefulness of the great invention. By 1860 over 50,000 miles of telegraph line were being operated in the United States. All the cities of the eastern half of the country were connected with one another and in 1860 a line was built from the Cordillera to the Pacific coast. The use of the telegraph in train dispatching was begun about 1850. By 1900 there were about 200,000 miles of telegraph line in the country and the number of messages sent each year amounted to nearly 65,000,000.

The services which the electric telegraph performed in the operations of commerce are incalculable: producer, consumer, and merchant were brought into immediate and constant touch with one another, regardless of the distance by which they were separated; the conditions of demand and supply could be made known at all markets; price quotations could be carried broadcast to all parts of the country at the same time; and information concerning the industrial and business situation in any locality could be communicated instantly to any point. Business men could direct their enterprises from a distance, and merchants in widely separated localities could transact their affairs with one another with as much expedition and certainty as if they were together.

[1] E. L. Morse (ed.), *Samuel F. B. Morse, His Letters and Journals.* 2 vols.

Commerce was enabled to rid itself of many costly practices that encumbered its processes under previous conditions. A large number of middlemen were dispensed with, and the costs of their commissions taken off the price of commodities, the amount of stock in trade necessary for a merchant to keep in store was greatly reduced, and the greater certainty with which conditions of the future could be calculated decreased the margin necessary to allow for safety in commercial transactions.

Other means of communication also became highly developed during the century. The efficiency of the postal service given to the people by the government was improved constantly, and at the same time the rates of postage were greatly reduced. The railway post-office, the free delivery of mail by carriers in cities and in many rural districts, and the postal money-order system were some of the more important improvements in the service. The mileage of post-routes in 1900 was 500,989, the number of post-offices 76,688 and the number of pieces of all kinds of mail matter handled 7,129,990,202. The telephone was invented in 1876 and quickly became an important adjunct to commerce. The number of newspapers, trade journals, and other publications grew very rapidly, and their usefulness as a means of spreading information concerning prices and business conditions and as a medium for advertising made them a prominent factor in the development of trade. In 1900 nearly 21,000 newspapers and periodicals were being published in the United States.

FUNCTIONS AND DEVELOPMENT OF MARKETS AND EXCHANGES.

In the organization of markets or the actual manner in which buyer and seller meet to transact their business there was as marked a development during the century as in the methods of transportation and communication. This was true particularly as regards the market for the staple agricultural products, such as grain, cotton, and live-stock. In the marketing of most manufactured goods and most of the mineral products, including the two leading ones, coal and iron, the organization consistently preserved the form and principle of the direct-selling system based on actual bargaining between seller and buyer, though there were many modifications in the details of the methods employed by producers to get their wares to consumers either directly or through a series of wholesaling and retailing middlemen. It will be unnecessary to discuss this form of organization. In the marketing of many raw materials, and especially of farm products, instead of the direct-selling system which prevailed during the first part of the century there was developed a series of exclusive markets or produce exchanges in which the prices of products and the volume of exchanges were determined by the competitive bidding of a restricted class of organized traders. The importance of the functions of these produce exchanges and the

influence they exerted on commerce warrant a brief description of their chief features.

The great produce exchanges of the United States began to develop about the middle of the nineteenth century in response to the need for a well-organized market for the distribution of the staple agricultural products of the country, which had increased in amount until they so far exceeded the local demands each year that the surplus stocks were sufficient to supply materials for a trade world-wide in its extent. The improvements in the methods of transportation and communication facilitated the growth of trade, but in order to secure an adequate distributive system it was necessary to develop a special commercial organization in which buyers and sellers would have the advantages of maximum promptness and convenience as well as of uniform standards of usage, and consequently general and special exchanges, the former admitting several commodities to the list of products which could be bought and sold within its precincts and the latter organized for trade in one commodity only, grew up at the important commercial cities which were the collecting and distributing points for the various agricultural products of the country.

A produce exchange is merely an organized market in which people may buy and sell freely certain commodities either in person or through a broker. The main purposes of the exchange, which are always enumerated in its charter, are: to maintain a suitable room for a market-place; to inculcate just and equitable principles in trade; to establish and maintain uniformity in commercial usages; to acquire, preserve, and disseminate valuable information; and to adjust controversies and misunderstandings between persons engaged in business. The exchange itself makes no transactions in the trade as an organized body, the trading being done solely by individual members, who are limited in the extent and nature of their transactions only by their own desires and the standards imposed by the special trading rules and regulations of the exchange organization.

There are two main kinds of transactions on a produce exchange—trading in a commodity for immediate delivery or "spot" transactions, and trading in contracts for delivery at a specified future time or dealings in "futures." The original and basic purpose of the organization of exchanges was to facilitate the former class of sales by providing a convenient place at which all the merchants interested in the trade in a particular commodity could meet and buy and sell among one another. This kind of trading still comprises a large amount of the business done on produce exchanges. Practically all the smaller exchanges have never been anything else but "spot" or "cash" markets, but in the larger exchanges not only did cash trading grow to a large volume, but speculative dealing in a few commodities, such as grain and cotton, also became highly developed.

The advantages of the cash market of the produce exchange are obvious. The organization of a series of exchanges creates a continuous market, insures a more or less general level in the price of a commodity in all markets, and gives an added mobility to produce, all of which result in great benefit to both producer and consumer. The dealing in futures on produce exchanges has met with much unfavorable criticism, but a clear understanding of the exact nature of speculative trading reveals that when conducted within proper limitations it renders an important service to commerce which could not well be dispensed with. The chief advantage lies in the fact that it affords a way for merchants and manufacturers to insure themselves against a loss of ordinary trade profits by shifting the burden of risk to an expert commercial class who make it a profession to assume the risk on a chance of gain from price fluctuations at different times and places. A grain merchant, an exporter, or a miller, through the process of "hedging," can protect himself against the hazard of a loss of trade profit, and the service which a produce exchange renders enabling this to be done makes it both an effective and an extremely useful commercial institution. Evil practices, it is true, have risen in connection with speculative operations on exchanges, but these do not detract from the usefulness of these markets as far as concerns their legitimate and proper functions.

This brief description indicates in a general way the purpose and function of produce exchanges. As was previously stated, the great exchanges of the United States were organized about the middle of the nineteenth century. Some of them were the direct successors of mercantile organizations without trading functions which had been formed originally for the purpose of promoting the commercial interests of various sections of the country. The New York Produce Exchange, incorporated in 1862, had an ancestry running back through many both trading and non-trading organizations, the earliest of which were founded in colonial times. The Merchants' Exchange of St. Louis, the history of which as a trading body began about 1850, was the successor of the St. Louis Chamber of Commerce, organized in 1836 primarily as a debating society. The Chicago Board of Trade was organized in 1848 and incorporated eleven years later. The New York Cotton Exchange and the New Orleans Cotton Exchange were both incorporated in 1871. Other important exchanges organized during the latter part of the century were the Live Stock Exchange of Chicago, the Chamber of Commerce of Minneapolis, the Duluth Board of Trade, and the Board of Trade of Kansas City. Many other exchanges were established at other important commercial cities. All of these great markets provided the medium through which a large part of the agricultural produce of the country was transferred from producer to consumer, and their organization and growth constituted an important feature of the commercial progress of the century.

FEDERAL AND STATE BANKING.

Of equal importance in the operations of commerce with the organization of the market and the methods of transporting goods, is the system for settling accounts between debtors and creditors. The difficulty and inconvenience of attempting to complete every commercial transaction by a transfer of money led long ago to the devising of a means by which settlements could be made by transfers of credit and to the development of banking institutions to facilitate such transfers. Classic still is the comparison made by Adam Smith of the "judicious operations of banking" to a "waggon-way through the air," and in Alexander Hamilton's report on the Bank of the United States one may find a concise and lucid statement of the whole theory of modern banking.

The primary function of a bank is to serve as a "manufactory of credit." This credit a bank lends to business men who transfer it from one to another for the payment of debts just as they would transfer money, it being understood that the bank stands ready to redeem its credit obligations at all times with lawful money. The evidence of bank credit used in transfers may in general take two forms—bank notes payable to the possessor on demand, and checks or drafts payable to the order of a specified individual. In the early period of American history the bank note was the form of bank credit most extensively used, but as commerce grew and the banking business of the country developed in efficiency the method of settlement of business transactions by the use of checks and drafts became proportionately more important, and at the close of the century by far the largest part of the trade of the country was carried on by this means.

Banking in the United States has had a checkered history. During the colonial era the scarcity of specie was the cause of most of the attempts at banking, which were in the main confined to efforts of companies or partnerships to emit on landed security bills of credit which would supply the need for a circulating medium. Such experiments violated the cardinal principles of safe banking, that a bank should be ready to redeem its obligations in money, and that its investments should have not only the quality of safety but also that of being "quick," that is, easily convertible into money at any time. Practically all of the experiments failed dismally or were suppressed by the colonial governments or by the government of the mother country.

At the time of the adoption of the Constitution there were three banks in the United States—one each in New York, Boston, and Philadelphia—all of which were organized after 1780. The Philadelphia institution, called by name the Bank of North America, was chartered originally by Congress and it rendered important service to the National Government during the closing days of the Revolution, at a time when the credit of the country had reached its lowest ebb and the Continental currency had become worthless. All three of these banks were man-

aged in a conservative manner and all of them continue to exist at the present time.

Twice after the formation of the Union the National Government granted a special charter to a bank, the Government becoming a shareholder in the bank in both instances. The first Bank of the United States, chartered in 1791, was organized according to plans formulated by Alexander Hamilton, who fathered a number of important measures intended to restore the disordered finances of the nation and place its credit on a firm basis. The bank was an extremely successful enterprise. It was the fiscal agent for the government, and it rendered a still greater service by acting as a regulator of the currency, its high standards compelling State banks carefully to avoid any undue expansion of their issues of paper money. Mainly because of the opposition of State banks, which wished to avoid the competition of such a powerful rival, the first Bank of the United States failed to secure a renewal of its charter, and in 1811 it was put in liquidation. A large number of additional State banks immediately sprang into existence to take its place. Lack of proper regulation permitted a rapid inflation of the currency. During the sharp crisis of 1814 most new banks in all the States, and most old banks outside of New England, suspended specie payment, and the Federal Government, with most of its money deposited in the suspended banks, the notes of which were quoted at discounts varying from 10 to 30 per cent, found itself in desperate financial straits. The ending of the war brought a measure of relief, but the disordered state of the currency induced President Madison to recommend the establishment of a second bank, which was chartered, accordingly, in 1816. During the first few years of its career the bank was nearly ruined by the mismanagement of its directors, but by 1820 it was placed in a sound condition and it eventually succeeded in its original purpose of establishing a sound and uniform currency. Unfortunately the question of renewing the charter of the bank was made a political issue by its president for the purpose of defeating Andrew Jackson in 1832. A spectacular conflict ensued in which Jackson was completely victorious and the bank failed to secure a renewal of its charter, falling a sacrifice to its entanglement with the political fortunes of Henry Clay and the Whig party.[1]

Between 1836, the time of the expiration of the charter of the second Bank of the United States, and 1863, the year of the enactment of the national banking law, the regulation of banking in the United States was left to the individual States, the Federal Government making no effort directly to control the business. The overthrow of the second Bank of the United States was followed, as was the liquidation of the first, by the organization of a large number of State banks. The lack of adequate and uniform public regulation permitted almost universal fraud and abuse, and the banking business of the country during these

[1] White, *Money and Banking* (4th ed.), Book III, chap. viii.

years was in an almost continual state of disorder. As the chief operation of banks consisted in the emission of currency intended for general circulation, the country became flooded with a great variety of bank notes, many of which fell rapidly in value. Many States, instead of attempting to check fraudulent banking operations, remained passive, and some even enacted measures intended to protect unstable banking institutions in their reckless practices. Notes of most banks were quoted at a certain discount in different sections of the country; merchants were compelled to refer to "Bank-Note Reporters" to determine the value of the currency tendered by their customers; and to complicate the situation, counterfeits of every description were put in circulation. Bank failures were of course common occurrences, and the losses suffered by the people totaled millions of dollars.

The States of the South and West were the worst offenders in the matter of failing to regulate banking, though there were some notably sound banks in both these sections, the most conspicuous examples being the State Bank of Indiana, the State Bank of Ohio, and the Bank of Virginia. The banks of Louisiana, organized according to the provisions of the banking law of that State enacted in 1842, were also sound. The banking system of the New England States afforded an example of safe banking which contrasted strongly with the prevailing systems in other parts of the country. The Suffolk Bank of Boston, aided by the legislature of Massachusetts, established the New England system. This bank accepted at par the notes of any solvent New England bank which would provide funds for their redemption and also keep a permanent deposit at the Suffolk bank, the interest on which would provide compensation for its trouble. Banks in all parts of New England entered the system. When the legislature of Massachusetts passed a law forbidding banks to pay out any notes but their own, the Suffolk was virtually constituted a clearing-house for all the banks of that State and through the voluntary action of the banks in other New England States it occupied a similar position for them. The system was highly advantageous to New England, and the credit of the banks under the system was so good that their notes found ready acceptance throughout the entire country. In New York the famous safety-fund system was instituted in 1829, but about the time that the system was developed to a point of greatest possible efficiency it was abolished. Under the free banking system established in 1838 there was a renewal of unsound banking, but public opinion and effective regulation had almost eliminated reckless methods by the time of the outbreak of the Civil War. In Pennsylvania there was a large number of disastrous bank failures during this period of unregulated State banks. This State repeatedly enacted laws declaring that all banks suspending specie payment should forfeit their charters, but whenever general suspension occurred the legislature promptly passed measures relieving the offending institutions from being subjected to the penalty.

The national banking act was passed during the Civil War. The purposes of this measure were to bring banking under the supervision of the Federal Government, to regulate the currency, and to provide a market for government bonds. In 1865, by imposing an annual tax of 10 per cent on the notes of State banks, Congress gave to the national banks a monopoly of issuing notes for general circulation. The law providing for the organization of national banks laid down a system for their regulation and inspection by officials of the Federal Government. The adoption of the new system produced some beneficial effects. Its most notable service, in view of the condition of banking prior to the time the national banking act was passed, was that it provided a bank-note circulation of uniform value. Notwithstanding the improvements brought about, the banking and currency system of the country was still burdened with many defects. The extreme rigidity of the bond-secured currency and the lack of cohesiveness and cooperation among the banks in times of strained financial conditions were the principal disadvantages with which the banking business was forced to combat, and these defects all tended to hinder the commercial progress of the country.

The great commercial and financial crises which visited the country during the nineteenth century were in part the result of the conditions of banking. In 1814 and again in 1818 the injudicious issue by State banks of a large volume of notes, for the redemption of which there was no specie available, coupled with a sudden attack on these issues by specie-paying banks, was largely responsible for the misery into which the nation was plunged. In 1837 not only was there an absence of an adequate cash reserve against the large volume of bank notes in circulation, but the loans of many of the banks had been made to transportation and industrial companies whose enterprises were foredoomed to failure. The stocks representing a large part of the assets of the banks were utterly worthless, and the resulting failures were exceedingly disastrous. The panic of 1857 was a true financial panic. There was a sudden loss of confidence, and the supply of specie again proving inadequate, many banks were forced to suspend payment. This occasion, however, was not marked by the disaster that was witnessed during the years immediately after 1837. Business had been good and for the most part conservatively managed; the securities held by banks were those of solvent and prosperous organizations, and consequently the country quickly recovered. The panic of 1873 was unfortunately a repetition of that of 1837. Heavy investment in railroads that were built long in advance of the need for them was the chief fault of great banks, the failure of which precipitated the catastrophe. Again there was a lack of assets to offset the heavy liabilities of the failing concerns and the depression was protracted and severe. The crisis of 1893–95 was due less to unsound banking than to the purchase and coinage of silver under the Acts of 1878 and 1890, though

the undue extension of credit to speculative business enterprises and the inherent weaknesses in the banking system of the country were again important causes of the severe depression.

By the close of the nineteenth century the banking business of the United States had grown to very large proportions. In 1900 there were 12,975 banking institutions in the country, exclusive of savings banks, which numbered 1,002. The national banks, of which there were 3,732, possessed resources amounting to $4,944,165,000. The Comptroller of the Currency received reports during the year from 6,650 State, incorporated, and private banks, the resources of which amounted to $5,841,658,000, making the total resources of the 10,382 banks which reported $10,785,823,000. The resources of the savings banks were $2,624,833,000, and 290 loan and trust companies reported resources valued at $1,330,160,000. The great commercial importance of the banking business was indicated by the total amount of bank clearings for the year, which reached a sum of more than $84,500,000,000.

One important service of the banking business to commerce has already been referred to. The bank is the agency employed in the settlement of accounts between buyers and sellers. The convenience of banking to the business world and the speed, certainty, and facility which it gives to the operations of trade have made it one of the most effective and useful modern business institutions. In addition to being agents for the completion of commercial transactions of ordinary character, banks also perform an important service in acting as a reservoir for the collection and utilization of the unused capital of a community. The large funds deposited with banks are always available for loans to mercantile and industrial concerns, and thus they may constantly be employed in the production of additional wealth. As Levi P. Morton justly says: "To national life the banking system is as the arterial system to animal life. Through it circulates the vitalizing current which sustains the brain of business and statecraft and strengthens the arm of labor." As custodians of the resources of a community bankers are placed in a position of extreme responsibility. Special institutions, the credit and commercial agencies, have been developed, the function of which is to determine, after careful investigation, the strength of the credit of business firms, and the information supplied by these agencies assists bankers in deciding whether loans can be made with safety to the individuals who apply for them.

DEVELOPMENT OF CORPORATIONS.

In turning finally to a consideration of business organization as a whole within the United States, without regard to any distinct kind of enterprise, it may be said that there was one institution which held a position of commanding importance in the economic and commercial development of the nation during the nineteenth century. This institution was the private business corporation. In the early period

of the history of the country the leading industrial activities could easily be carried on by individual business men or by partnerships, but as population spread and the natural resources of the country became available for exploitation, it quickly became apparent that the older types of business structures could not command a supply of capital sufficient to carry out the large projects in the fields of transportation, manufacturing, and banking necessary to a proper utilization of the economic opportunities which the country afforded. The corporation was a device in every way suited to the needs of the situation. It afforded a means of concentrating the capital of a large number of persons into a single enterprise without subjecting the contributors to a risk greater than the amount of their investment, or requiring their personal attention to the management of the business, and the other advantages of corporate organization, such as the continuity of existence and the easy transferability of ownership, were additional features that favored its extensive use.

At the time of the formation of the Union there were few private corporations in the United States. Within a few years, however, the number began to grow rapidly, the first marked increase coming shortly after 1790, with the organization of a large number of turnpike companies in the Eastern States. At first, transportation and banking offered the best fields for corporate activity; but manufacturing soon afforded abundant opportunity for general investment, and the corporation began to displace the individual and the partnership in this branch of industrial activity. Early corporations were chartered by special legislative acts, but, both because of the corrupt practices that arose in connection with attempts to secure the enactment of special legislation and because of the need for a more comprehensive and uniform system of dealing with the questions affecting the organization and control of chartered companies, most of the States passed general laws regarding their formation and management. Under the liberal policies of the State governments and with the growth of population, wealth, and commerce the corporation rapidly assumed a position of dominance in all industrial and financial enterprises. Most of the transportation, banking, insurance, manufacturing, and mining interests of the country passed under the control of corporations before 1850, and after that year, as the need for larger and larger amounts of capital arose and as the advantages of large-scale production and concentration of industry became more apparent, there was an even more rapid growth in their number and a greater increase in their wealth and dominating influence. In 1900 practically all of the 192,000 miles of railroad in the United States were owned and operated by railway corporations, of which the number was 2,023; there were 40,743 corporations engaged in manufacturing, and the value of their output comprised two-thirds of the total value of all product of manufactures; of the products of mines and quarries more than 86 per cent was produced by

incorporated companies; and practically all the banking and insurance business of the country was under corporate ownership. An increasing proportion of the retail mercantile business was assuming the corporate form of organization, and even in agriculture, especially in the Western States, where projects for extensive irrigation of arid lands called for large outlays of capital, the corporation was assuming a position of no little importance.

The chief advantage of the corporation lay in the fact that it made possible the accumulation of a large amount of capital to be devoted to a single venture. To move a great inert mass requires a powerful lever. The conquest of a continent was a problem too great for individual effort; it took the associated effort of many individuals to surmount the difficulties which the situation presented, and the corporation made possible the union for a common purpose of an unlimited number of individuals. Furthermore, the placing of a tremendous amount of capital under the control of a few persons brought to the front a large number of men of great foresight and capacity, the "captains" of industry and finance, to whose genius for management and organization of productive forces was partly due the spectacular rise of the United States to a place of foremost rank among the industrial nations of the world. The powerful agencies which the corporation set in motion made economic development rapid, and, on the whole, steady and uniform.

The corporation was not, however, without evil. Though to its influence may be ascribed in a large measure the rapidity of material progress, it was at the same time often used as a means for the perpetration of dishonest and degrading acts which brought a train of uneconomic and wasteful consequences. Adventurous speculators formed companies to carry out impracticable or impossible schemes, and brought ruin to themselves and to many other individuals of a speculative turn of mind who were induced to participate in their unwise ventures; and many corporations were launched for no other purpose than the creation of a mass of worthless securities to be sold by the promoters to easily deceived and unwary investors. Corporations organized for legitimate ends were also often used as a means of swindling stockholders by unscrupulous directors who absorbed the profits by leasing valuable privileges to themselves or by other forms of mismanagement. The purchase at low cost of valuable franchises was often accomplished by bribery and corruption of public officials, and undue and improper influence was often used to secure the passage of legislation desired by corporate interests, the Federal Government itself not being able at all times to avoid the taint of suspicion. The peculiar legal status of the corporation as a person in contemplation of law seemed to cause officials to feel that the acts of the corporation were not their own acts and to lead to a lower standard of business morality and to the condonement by corporation officials of unethical practices,

which would not have been countenanced under the previous forms of business organization.

In addition to permitting the development of evils such as those mentioned above, the corporation was the instrument for the development of what was probably the greatest economic problem of the latter part of the nineteenth century—the problem of combination and monopoly. It was inevitable that corporations engaged in the leading industries in the United States, where there existed such great opportunities for prosperous growth, should eventually become enormously wealthy and powerful, and it was equally inevitable that in time, as production expanded, great corporations which were rivals in the same branch of industry should engage in a competitive struggle for the possession of markets which all could serve. When rich and powerful organizations with tremendous resources at their command met in competition the resulting conflict was disastrous. Defeat usually meant ruin, and victory was often purchased at the same cost. Out of the frequent disasters resulting from rate wars between 1860 and 1880 railroad managers learned that continued struggle usually brought only destruction, and that the path of safety lay in the elimination of competition. For some years the managers of rival roads attempted to avoid competition by means of rate and traffic agreements, but when the enactment of State and Federal laws to enforce competition rendered it impracticable to make such agreements, extensive combination and consolidation were resorted to as the best available means of securing cooperative action. In a general way the United States was divided up among a number of powerful interests, and the perfection of various devices for securing harmonious relations among these interests insured the absence of future wars of destruction.

Though the tendency toward the amalgamation of rival interests in the fields of manufacturing and mining became almost as strong as in the field of railway transportation, competition among rival manufacturers was not so inherently destructive as was competition among railroads, and manufacturers began later than did the railroads to form large combinations. The earlier industrial combinations may be said in general to have been due chiefly to a desire for monopoly profits on the part of those by whom the combinations were effected. Sometimes the union of rival interests would come about because of pressure brought to bear on smaller concerns by a powerful corporation which, because of economies of large-scale production and preferential advantages secured from railroads, was able to give its weaker competitors a choice between absorption or destruction. The Standard Oil Trust was an example of this type of combination. Other combinations resulted merely because rival producers became convinced that greater profits could be secured through cooperation than through competition, and they pooled their interests accordingly. Public protest against such attempts at monopolization resulted in a large amount of prohibitive legislation directed against trusts and pools. The dissolution

of such agreements was promptly followed, however, by the adoption of much more effective methods of combination—either the complete merging of the competing concerns into a single one, or the formation of a holding company, usually a gigantic corporation which took over the stock of the various combining companies in exchange for the stock of the new organization. The combinations were usually accompanied by large issues of watered stock which represented a capitalization of the expectations of the promoters of the new companies. The success of many of the earlier combinations and the advance in the market value of their watered stock revealed the fact that combination *in and of itself* might prove an enormous source of profit, and it was this idea as well as the desire to eliminate competition that furnished the incentive for many of the later industrial combinations. Speculative promoters took quick advantage of the trend towards combination and they created for themselves and for others paper fortunes of great dimensions, many of which were transmuted into real fortunes during the rising tide of prosperity after 1896. The many combinations among most of the companies out of which was eventually formed the United States Steel Corporation, and the formation of that company itself, furnished conspicuous examples of excessive capitalization.

Too often the monopolistic combinations took advantage of their position to raise prices and exact heavy tribute from the consuming public. Attempted competition by outsiders was throttled by local price-cutting, by factors' agreements, or by other unfair devices. Unwilling to endure or tolerate some of the unfair practices, many States passed measures intended to prevent the formation of monopolistic combinations. However, the indulgent policy of a few States toward all private corporations virtually negatived the efforts of the others. In 1890 the Federal Government, acting on its constitutional authority to regulate interstate trade, passed a law declaring illegal "every contract, combination in the form of a trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States," and providing punishment for "every person who shall monopolize or attempt to monopolize . . . any part of the trade or commerce among the several States." The interpretation given to this statute by the Supreme Court in its decision in the E. C. Knight (Sugar Trust) case in 1895 seemed to indicate that the law would be of little effect, but in later decisions, in the cases of the Trans-Missouri Freight Association (1897), the Joint Traffic Association (1898), and the Addyston Pipe and Steel Company (1899), the court seemingly modified its previous position and clearly showed that the statute could be used to put a stop to monopolistic methods in controlling railroad rates and to bring about a dissolution of a combination through which a monopoly of interstate commerce in any commodity was effected. With this direct application of Federal control there was foretold another era of modification in the forms and methods of business organization and management.

CHAPTER XVIII.

COMMERCIAL CHANGES OF THE OPENING YEARS OF THE TWENTIETH CENTURY.

Growth of population and industry, 1900 to 1910, 313; of agricultural industries, 313; of manufacturing, 315; of minerals, 316; of forest products, 316. Development of transportation and internal trade, 316. Growth of electric railways and the use of electricity, 317. Waterway improvement and projects, 318. Public regulation of transportation and commerce, 319. Regulation of corporations, 321. Revision of the tariff, 322. The conservation movement, 323.

In the preceding chapters there has been given a brief description of the development of the United States during the nineteenth century from an economic position of comparative insignificance to a place of importance among the rich and powerful nations of the world. Rapid as was the material progress of the country during the nineteenth century, the opening of the twentieth century held promise for growth yet more rapid. The number of people in the country was increasing and there was room for millions more; the products of agriculture were enlarging steadily; the natural resources were being drawn upon each year for a larger and larger quantity of fuel and raw materials; manufacturing was growing at an unprecedented rate; new industries were rising in response to new wants and needs; new sources of power were being utilized; new discoveries, new inventions, and new methods were multiplying the productivity of all industry; the entire machinery of production and distribution was gaining in efficiency and power.

As civilization advances each century builds upon a heritage from centuries gone before. The achievement of the nineteenth century was the foundation upon which the century to come was to build. The opening of the new century gave promise that the progress of the United States was to continue not only through using the fruits of former success, but also through the uprooting of old evils and the redemption of old faults. As was pointed out in another place, though the efforts to solve the great economic problems of the latter part of the nineteenth century had not met with a large measure of success before the century closed, there were nevertheless distinct indications that the immediate future would witness more determined efforts to secure a readjustment of the unsatisfactory conditions in the industrial system. The fruits of these efforts, together with the steady improvement in general material welfare, constitute the significant features of the economic history of the United States during the opening years of the twentieth century.

That the promise which the beginning of the century seemed to have for a continuance of material progress was not false was amply demonstrated by the achievements of the first decade of the new century.

A comparison of the statistics of the census of 1910 with the statistics collected at all previous census years shows that the first decade of the twentieth century witnessed a greater increase in the population and wealth of the United States than any previous ten years. In the following paragraphs will be given a brief survey of the material growth of the nation from 1900 to 1910, to be followed with a statement concerning the development of internal trade during that period; and the chapter will close with a short discussion of the important changes in government policies affecting industry and trade.

GROWTH OF POPULATION AND INDUSTRY FROM 1900 TO 1910.

The total population of the continental portion of the United States increased from 75,994,575 in 1900 to 91,972,266 in 1910.[1] Again the Western States showed a greater percentage of increase than the other States, and the center of population shifted a few miles farther westward. Almost 9,000,000 foreign immigrants entered the country during the first ten years of the century, the number of arrivals for each year after 1901 ranging from 648,000 to 1,285,000.[2] The valuation of the real and personal property of the people of the United States in 1904 showed the total physical wealth of the country, which in 1900 had been $88,500,000,000, to be $107,000,000,000 or $1,318 per capita.[3] By 1910 the amount had probably increased to more than $180,000,000,000.

TABLE 35.—*Production and value of specified crops in the United States, 1899 and 1909.*[1]

Crops.	Production.		Value.	
	1899	1909	1899	1909
All crops, value	....	....	$2,998,704,000	$5,487,161,000
All cereals, bush	4,438,857,000	4,512,564,000	1,482,603,000	2,665,539,000
Corn, bush	2,666,324,000	2,552,189,000	828,192,000	1,438,553,000
Wheat, bush	658,534,000	683,379,000	369,945,000	657,656,000
Oats, bush	943,389,000	1,007,142,000	217,098,000	414,697,000
Hay and forage, tons	79,251,000	97,453,000	484,254,000	824,004,000
Tobacco, lbs	868,112,000	1,055,764,000	56,987,000	104,302,000
Cotton, bales	9,534,000	10,649,000	323,758,000	703,619,000
Cotton seed, tons	4,767,000	5,324,000	46,950,000	121,076,000
Potatoes, bush	273,318,000	389,194,000	98,380,000	166,423,000
Other vegetables, bush	....	....	140,152,000	251,686,000
Orchard fruits, bush	212,365,000	216,083,000	83,750,000	140,867,000

[1]*Abstract, U. S. Census 1910*, p. 360.

The statistics for agriculture for 1910 showed that while there had been some increase in the output of farm products since 1900, the percentage of increase was not so large as the percentage of increase

[1]*Abstract, U. S. Census 1910*, p. 21.
[2]*Statistical Abstract of United States*, 1912, p. 789. [3]*Ibid.*, 738.

of the population. The number of farms increased between 1900 and 1910 from 5,737,372 to 6,361,502, and the farm acreage from 838,591,774 to 878,798,325. The value of farm property, including land, buildings, implements and machinery, and domestic animals doubled in the ten years, advancing from $20,000,000,000 to $40,000,000,000.[1] The increase in the production of the most important crops is shown in table 35. The increase in the value of the various products, which because of rising prices was much greater proportionately than the increase in the actual quantity of articles produced, is also shown.

In the number of domestic animals in the United States there was an actual decrease between 1900 and 1910 in every important class except horses and mules. In the case of live-stock, however, the change in prices caused its total money value to be much greater in the latter than in the former year, notwithstanding the reduction in the number of animals. The statistics for the principal classes of this stock for the last two census years are given in table 36.[2]

TABLE 36.—*Statistics of live-stock in the United States, 1900 and 1910.*

	Number.		Value.[1]	
	1900	1910	1900	1900
All domestic animals	....	....	$2,979,197,000	$4,760,060,000
Cattle	69,335,000	63,682,000	1,475,204,000	1,499,523,000
Horses, mules, asses, and burros	24,752,000	27,618,000	1,098,546,000	2,622,180,000
Swine	64,686,000	59,473,000	231,978,000	399,338,000
Sheep	61,735,000	52,838,000	170,203,000	232,841,000

[1]Value given only for domestic animals on farms.

The relative decrease in the output of agricultural products was reflected in a falling-off of the exportation of foodstuffs. The wheat crop of the United States in 1910 was larger than that of any previous year but one (1902), but the exports of wheat and flour that year were less than they had been for more than twenty-five years, except in 1905, when there was a great shortage in the crop. The exports of wheat in 1911 were even less than in 1910.[3] The steady decrease in the production of food products as compared with the amount of domestic consumption has led some persons to assert that not many years will have passed before the United States becomes a grain-importing instead of a grain-exporting country. However, the United States has not yet neared the limit of its agricultural resources. Even if there were not a very large area of untilled land available for future cultivation, the possibilities lying in more scientific and more economical methods of cultivating the soil now in use, if taken advantage of,

[1]*Abstract, U. S. Census 1910*, p. 265. [2]*Ibid.*, 311, 342.
[3]*Statistical Abstract of United States, 1912*, p. 591.

will postpone for many decades the time when there will be no annual supplies of grain, live-stock, and provisions for exportation.

If the expansion in agricultural industries did not keep up with the increase of population between 1900 and 1910, the relative loss was made up for in a way by the amazing development that took place in manufacturing. Twice since 1900 a census of manufactures has been taken. On both occasions statistics were collected only for factory industries, the neighborhood, hand, and building industries being disregarded. Table 37 shows a record of the progress in manufacturing from 1899 to 1909. All the statistics refer only to factory production.[1]

TABLE 37.—*Factory manufactures in the United States, 1899, 1904, 1909.*

	1899	1904	Per cent of increase 1899–1904.	1909	Per cent of increase 1904–1909.	Per cent of increase 1899–1909.
Factories	207,514	216,180	4.2	268,491	24.2	29.4
Capital (thousands of dollars)	8,975,256	12,675,581	41.2	18,428,270	45.4	105.3
Wage-earners (average number)	4,712,763	5,468,383	16.0	6,615,046	21.0	40.4
Wages (thousands of dollars)	2,008,361	2,610,445	30.0	3,427,038	31.3	70.6
Value of products (thousands of dollars)	11,406,927	14,793,903	29.7	20,672,052	39.7	81.2

The five leading manufacturing industries, according to the value of their products, were the same in 1909 as in 1899, the only change being a reversal of the order of the first two. In 1909 these industries were in order: meat packing; foundry and machine-shop products; lumber and timber products; iron and steel, steel works, and rolling mills; and flour-mill and grist-mill products. The first three of these each had an output of more than $1,000,000,000 and the other two each more than $880,000,000 for the year, and 38 other manufacturing industries contributed products ranging in value from $100,000,000 to $735,000,000. Almost three-fourths of the total manufactures were produced in the section of the country east of the Mississippi River and north of the Ohio River and the southern boundary of Pennsylvania. New York, Pennsylvania, Illinois, Massachusetts, and Ohio maintained their places as the leading manufacturing States in the order named, the five together producing more than one-half of the total manufactured product. The city of New York again produced approximately one-tenth of the total product, and Chicago and Philadelphia together almost as much as New York.

The tremendous increase in manufacturing gave the United States a large surplus of wares to dispose of abroad, and the opening years of the twentieth century were signalized by a rapid expansion of the annual

[1] *Abstract, U. S. Census 1910*, p. 439.

exports of manufactured goods. In 1899 manufactures ready for consumption and manufactures for further use in manufacture made up 30 per cent of the total exports of the United States and in 1912 they comprised 47 per cent of the total. One of the important features of the foreign policy of the United States during the greater part of the intervening years was the "dollar diplomacy," the frankly avowed purpose of which was to promote the foreign trade of the United States by seeking markets for its products. Manufacturing interests especially were indebted to the State Department for its efforts to find customers for the products of their rapidly expanding industries.

As would be expected from the remarkable increase of manufacturing, the mining industries of the United States had a period of great activity during the first part of the twentieth century. There was hardly a single mineral product the output of which did not show a substantial increase. The production of coal almost doubled between 1900 and 1911, increasing from 240,000,000 to 443,000,000 long tons.[1] The production of iron ore in 1900 was 28,000,000 long tons, and in 1910 it was 57,000,000 long tons. The next year showed some reduction, the total output being 41,000,000 tons.[2] The output of copper showed an increase from 270,000 long tons in 1900 to 490,000 long tons in 1911,[1] and the output of crude petroleum advanced during the same time from 54,000,000 barrels to 220,000,000 barrels.[3] The total value of the products of the mines, quarries, and the wells of the United States in 1909 amounted to $1,175,475,000, an increase of 52 per cent over the value of the output in 1902.[4]

The forests of the United States contributed an enormous supply of timber during this period. The lumber production of the country, which in 1900 was 35,000,000,000 feet, reached 45,000,000,000 feet in 1909. During the next two years there was a considerable decrease, the production in 1911 being 37,000,000,000 feet.[5] The yellow-pine belt of the South furnished a far larger portion of the timber cut during these years than any other section. Washington, however, became the leading lumber State near the close of the period.

DEVELOPMENT OF TRANSPORTATION AND INTERNAL TRADE.

Along with the agricultural and industrial expansion since 1900 there has been constant development in the inland transportation system of the United States. The mileage of the railroad net, though showing no spectacular increases such as those witnessed during the great periods of railroad building just after the Civil War and after the depression caused by the panic of 1873, has nevertheless grown steadily, an average of about 5,000 miles of line being added to the entire system each year since 1900. The total number of miles of railroad line

---

[1] *Statistical Abstract of United States, 1912*, p. 773. [2] *Ibid.*, 774. [3] *Ibid.*, 247.
[4] *Abstract, U. S. Census 1910*, p. 557. [5] *Statistical Abstract of United States, 1912*, p. 191.

operated in the continental portion of the United States in 1911 was about 253,000.

A notable change in transportation since 1900 has been the growth in the number of electric railways. Electric traction was first adopted for city street-railways in 1888, and near the end of the nineteenth century a beginning was made in the construction of electric railway lines for service between comparatively distant points. Since 1900 the development of interurban electric lines has been very rapid. In southern New England all the principal cities are connected with one another by electric railroads, and the total electric-railroad mileage, including both interurban and city street-railway lines, in Massachusetts, Connecticut, and Rhode Island is now greater than the mileage of the steam railroads. In Ohio, Indiana, Michigan, and Illinois the interurban electric railway has also reached a high development, there being a large network of lines spreading over the greater portion of these States. In New York, Pennsylvania, New Jersey, and many other States where there is a considerable number of urban communities grouped comparatively close to one another the electric interurban railway service is being steadily extended. The possibility of variation of the units of service according to the amount of traffic and the greater economy in construction and operation enables the electric railway to give a service that is both more frequent and cheaper than the service offered by steam roads. Though constructed mainly for the purpose of handling passenger traffic, the electric railways have also developed a freight service which is rapidly growing in volume. The handling of parcels and light package freight in and out of large cities, the transportation of farm products from rural districts to city markets, and performing the function of branch lines or "feeders" to steam roads have thus far comprised the most important part of the trolley freight service; but as the electric systems extend their lines they are entering the field as competitors with steam roads for all kinds of freight business. The great convenience of the interurban lines has had a strong influence on the development of communities where they have been built. Travel has been encouraged, rural districts have been brought into close touch with the cultural advantages to be found in cities, and there has been a distinct increase in commercial intercourse between city and country.

The great success that has attended the use of electricity as the motive-power for land transportation has led to some question as to whether the use of the steam locomotive might not eventually be entirely abandoned. Though the question of general electrification is not of pressing importance at the present time, it is not impossible that at some time during the twentieth century, as the fuel resources of the world become more scarce, it will be necessary to depend upon electricity generated by water-power to perform much of the work of

transportation now done by steam. Electricity has already been adopted to some extent by steam roads for particular branches of their service. In tunnels and subways and in terminal and suburban service the smoke, gas, and noise of the steam-engine render it highly objectionable, and in many cases it is being replaced by the electric locomotive. All traffic in the railroad tunnels under New York is hauled by electric engines. The use of steam locomotives in the city of New York and its suburbs has been practically eliminated, and the electrification of railroad lines in Chicago, Philadelphia, and several other large cities is either projected or already under way. The hauling of both freight and passenger traffic over heavy mountain grades is another kind of service for which the electric locomotive is well adapted both because of its mechanical superiority over the steam locomotive in this kind of work and because of the possibility of utilizing the water-power generally obtainable in mountainous districts. In addition to these special types of service some steam railways have electrified sections of track in certain densely populated districts for the purpose of giving more frequent local passenger service. The through freight and passenger traffic in such sections is still hauled by steam locomotives.

On the inland waterways of the United States, with the exception of the Great Lakes, traffic continued after 1900 to show a steady diminution in volume. There has arisen in recent years, however, a steady and insistent demand for a rehabilitation of inland water transportation in the United States, and numerous movements have been started in favor of ambitious projects of canal construction and river improvement. The people of New York in 1903 voted to expend $101,000,000 in building a new barge canal across their State to take the place of the old Erie Canal. The new waterway is to be much wider and deeper than its famous predecessor, and it is expected that it will be used by a large tonnage of traffic. The National Government is proceeding steadily with the canalization of the Ohio River, and in the course of a few years that stream will have a minimum depth of 9 feet all the year round from Pittsburgh to its mouth. The Mississippi, the Columbia, and some other rivers are also being improved. The two movements for waterway improvement that have commanded most attention are those looking to the establishment of a canal and river route of some kind from Lake Michigan to the Gulf of Mexico and to the construction of a great chain of inland waterways along the Atlantic coast to connect the numerous rivers and bays in that section and give a completely sheltered waterway all the way from New England to Florida. As was indicated before, the commerce on the Great Lakes has continued to thrive. In 1910 the traffic on this great waterway amounted to 85,000,000 short tons.

The general character of the internal commerce of the United States during the opening decade of the twentieth century showed but little

change, the principal features of the geographical distribution of industry prevailing at the close of the nineteenth century being in a general way maintained. However, with the increased production of wealth and the growth of population there has been a great expansion in the volume of internal trade. The growth of the total freight traffic received by railways from 1,082,000,000 tons in 1900 to 1,880,000,000 tons in 1910 is the best index of the growth of the internal movement of commodities. An analysis of the railway traffic of 1910 and a description of the general character of the internal commerce of the United States at the present time has already been given.[1]

PUBLIC REGULATION OF TRANSPORTATION AND COMMERCE.

For the development of the public regulation of transportation and commerce the twentieth century opened with a promise of progress, and this promise, too, has been fulfilled.

In the regulation of railroads the United States has made great advances since 1900. The first step taken, the Elkins act of 1903, was due as much to the solicitation of the railroads as to that of their patrons.

Before 1900, by means of numerous consolidations, combinations, and formal or informal rate agreements, the railroad corporations had succeeded in almost entirely eliminating active competition, and they had furthermore brought their mutual relations to such a degree of harmony that they were able to begin concerted action to raise freight rates everywhere throughout the country. Feeling it no longer necessary to give rebates to large shippers for the purpose of securing competitive traffic, and wishing to avoid as much as possible the chance of secret violation of a mere voluntary compact to abolish giving rebates and abstain from cutting rates, the railroad interests, aided by many shippers who were desirous of securing an end of personal discrimination, secured in 1903 the passage of the Elkins law, the most important provisions of which were that it would be illegal for a railroad company to charge any other than the published rate on traffic hauled, that the recipient as well as the giver of rebates should be subject to punishment, and that a railroad corporation as well as its agent could be punished for violation of the law. Though of great advantage to shippers, this law was of even greater benefit to the railroads. The law of 1887 had failed to put a stop to rebating and the practice often cost some railroads many millions of dollars a year. The Elkins act prevented the danger of such large losses in the future. With the volume of traffic constantly expanding, and with freight rates being increased, the railroads entered on an era of great prosperity.

But though personal discriminations were checked by the Elkins law, discriminations between places and commodities—discriminations from which the public and not the railroad suffered injury—were not

---

[1] Chap. xii, p. 200.

fected. The public decided that if personal discriminations could e removed, other evils could be removed also. The Interstate Comerce Commission was given authority to fix reasonable maximum ites on interstate traffic in 1906 by the passage of the Hepburn mendment to the interstate commerce act of 1887. The act of 1906 .so subjected express, sleeping-car, refrigerator-car, and pipe-line ompanies doing interstate business to the regulations of the interstate ommerce law, made stricter provisions as to granting passes, gave the ommission control over joint rates, provided for expeditious judicial tion on appeals from the orders of the Commission, authorized the ommission to prescribe a uniform accounting system for all carriers ibject to the interstate commerce act, and required carriers to make ich special statistical reports as the Commission might call for. This w was a long step forward in railroad regulation and it marked a great lvance in the solution of the railroad problem. Yet another forward ep was taken in 1910 by the passage of the Mann-Elkins law, which anted to the Interstate Commerce Commission the important power suspend proposed changes in rates on interstate traffic pending an amination into their reasonableness; it strengthened the "long and ort haul clause" of the original interstate commerce act by removing e words that robbed it of its vitality; and it created a special Comerce Court to be the court of appeal from the orders of the Interstate ommerce Commission.

There has now been established adequate machinery to prevent most the abuses in the railroad service. The Interstate Commerce Comission, after existing for a score of years with but limited power, has en transformed into a strong administrative body with functions of eat importance. It was thought that the creation of the Commerce ourt would greatly facilitate and expedite the details of railroad gulation, but unfortunately the Commerce Court, though in theory a oroughly desirable addition to the judicial system, proved in practice, first organized, to be a disappointment. Several of its early decions, some of which have subsequently been reversed by the Supreme ourt, were given in favor of the railroads. Because of this and because e new court assumed jurisdiction over some cases and matters which e Supreme Court held the Commerce Court was without authority to termine, the court became unpopular with the public. The impeachent and removal from office of one of its judges because of improper lations with certain railroad corporations served to accentuate the ntiment against the court. In 1913 it was abolished and the decions of the Interstate Commerce Commission again became appealable the other Federal courts.

One great problem of railroad regulation has been the conflict between ate and Federal authority. Many States have adopted comprensive systems for the regulation of railroad rates and services in

regard to traffic wholly within their borders and in some cases the State regulations have had a direct bearing on conditions of interstate trade, which is subject to regulation solely by the Federal Government. In some matters pertaining to the operation of railroads it has been conceded that the Interstate Commerce Commission has the authority to regulate conditions within individual States, but as regards the rate-making power there was for a long time much conflict of opinion. In the Minnesota rate case,[1] decided in June 1913, the Supreme Court held that the State governments possess the right to fix rates on intrastate traffic as long as the rates established are not so low as to be confiscatory, but at the same time the court stated that the power of Congress to regulate interstate trade includes the power also to regulate that part of intrastate trade the regulation of which affects in any way the conduct of interstate business. Consequently the court,[2] in June 1914, sustained a decision of the Interstate Commerce Commission which virtually annulled an order of the Texas Railroad Commission fixing certain Texas rates at a point which brought about a discrimination against jobbers shipping goods from Louisiana into Texas at rates which in themselves were not unreasonable.

An important innovation in the transportation service of the country has been made recently by the National Government, which amounts to a regulation of a part of the transportation system and which at the same time seems likely to have a great influence in promoting commercial intercourse within the country. This was the inauguration on January 1, 1913, of a domestic parcel-post system. The usefulness of the parcel post has been demonstrated in nearly all European countries, and the popularity it has attained in the United States during the brief interval that has elapsed since its authorization indicates that it is bringing about a large addition to the volume of domestic trade. Not only is the new service efficient and, except for long distances, somewhat cheaper than that offered by the express companies, but it also covers a much greater range of territory.

In the regulation of corporations other than transportation companies and in the control of monopolistic combinations there has also been considerable advance since 1900. In 1903 the Government took steps to secure a fund of accurate information concerning the methods and work of the great business organizations of the country, by authorizing the establishment of a special Bureau of Corporations, the duty of which was to make searching investigations into the organization and management of any corporation engaged in commerce among the States. The Bureau has made several reports on various industries that are largely controlled by corporate combinations. A vigorous effort has been made by the Department of Justice of the National Government to enforce the provisions of the Sherman anti-trust law, and a number

---

[1] 230 U. S. 352. [2] 234 U. S. 342.

of prosecutions under this act have resulted in decrees by the Supreme Court ordering the dissolution of several large industrial combinations as well as of some consolidations of transportation companies. In 1911 the Standard Oil Company and the American Tobacco Company, two of the most notable of the greater combinations, were ordered to be dissolved. Suits against the United States Steel Corporation, the International Harvester Company, and several other combinations were started in 1911, 1912, and 1913. The mere dissolution of large combinations has failed to have much effect on the industrial situation, but the information which the prosecutions have brought to light and the wide publicity which the cases have given to the various aspects of the entire problem of monopoly and combination have been effective agencies for promoting a movement toward establishing a better system of regulation.

The tariff system of the United States led once more to a political controversy. The growing dissatisfaction with the Dingley tariff act led to an almost universal demand that it should be modified, and in the presidential campaign of 1908 both the leading political parties pledged themselves to tariff revision. The Republican party was successful in the election, but the tariff law enacted by Congress in 1909 was not satisfactory to the public, and for this and other reasons the elections of 1910 and 1912 resulted in victories for the Democratic party. The pledge for tariff reduction was carried out in the Underwood law, signed by the President October 3, 1913. Those who brought about the enactment of this act advocated the "competitive principle," the aim of the new tariff law being "to introduce in every line of industry a competitive basis providing for a substantial amount of importation, to the end that no concern shall be able to feel that it has a monopoly of the home market gained other than through the fact that it is able to furnish better goods at lower prices than others." The average level of duties was reduced from 40.12 per cent to 29.6 per cent, the greatest reduction being made in the schedules dealing with various textiles, manufactures of metal, and agricultural products.

A reform of the currency system was accomplished by the enactment of the federal reserve act, which was introduced during the special session of Congress called primarily for revising the tariff, passed early in the regular session, and approved by the President December 23, 1913. This measure is designed to correct the fundamental weaknesses in the present currency system of the United States. By creating a system of regional reserve banks through which bank reserve funds may be quickly mobilized in time of emergency, the law is intended to overcome the decentralization which had characterized the national banking system; and by providing for the issuance, when necessary, of an asset bank-note currency, as well as for a greater freedom in the use of deposit credit, through the authorization of bank

acceptances and the extension of rediscount privileges, the law is intended to give the currency the requisite degree of elasticity.

Another movement of great economic importance that has been started in the early years of the twentieth century is the conservation movement. Near the close of the nineteenth century the people of the United States began to awake to the fact that the natural resources of the country were disappearing at an alarming rate. The forests were being depleted and no provisions made for their replacement, many kinds of fish and game were nearing the point of extinction, some mineral resources were being consumed at a rate that foretold nearing exhaustion, and the agricultural soil was being wasted and its fertility lessened. It was not the mere disappearance of these resources that aroused the sentiment for conservation so much as the fact that their destruction was being accompanied by the most needless waste and extravagance. The results of the conservation movement have been to check waste, to call a halt on the appropriation of valuable public domain by private interests, and to create a widespread movement in favor of a more economical utilization of the resources yet existing.

Considered in their entirety, the important events in the history of the United States during the early years of the twentieth century seem to indicate a new epoch in the economic and political history of the nation. Material progress has continued, but it has been attended with a greater measure of forethought, and the change in the attitude of the people toward their problems indicates that progress in the future will be directed with more wisdom. However, it is not only in problems of purely domestic concern that the chief difficulties of the future will be found. The growth of wealth and population and the increased diversity of production have made the United States a leading factor in the industrial, commercial, and financial activities of the entire world. In its position as a world power, which has come with economic development and political expansion, the nation will meet duties and responsibilities of a new kind. International relations, both economic and political, will constitute a leading feature of the next period of American history.

PART THREE

THE COASTWISE TRADE

By T. W. VAN METRE

CHAPTER XIX.

THE COASTWISE TRADE OF THE ATLANTIC COAST, 1789–1860.[1]

Legislation concerning coastwise vessels, 1789–1793, 328. Registry and enrollment of vessels under law of 1792, 330. Development of the coastwise trade to 1830, 332. Importance of cotton culture to the coastwise trade, 332. Nature of the trade of the South with the North, 333. Effects of the embargo and non-intercourse acts and the War of 1812, 334. Adoption of the protective tariff policy, 335. Foreign vessels excluded from the coastwise trade, 1817, 336. Establishment of "great districts," 1819, 336. Nature and volume of the coastwise trade in 1830, 338. The coastwise trade at leading seaports, 339. The coastwise trade from 1830 to 1850, 341. Increase in tonnage of coastwise fleet, 342. Coastwise receipts and shipments at New York, Philadelphia, Baltimore, and Boston, 1830 to 1850, 342. The coastwise trade at South Atlantic and Gulf Ports, 344. The decade from 1850 to 1860, 345. Competition of railroads with coastwise lines, 1850–1860, 345. Increase in coastwise trade, 1850–1860, 346. Growth in number of steamship lines, 346.

The coastwise commerce of the United States has passed through a series of interesting changes. Of relatively small value during most of the colonial period, it gradually increased in volume as the population of the country grew and industry became diversified, until it came to be the most important branch of the commerce of the nation. Compared to the foreign and the internal trade the coastwise business attained the point of highest development during the decade preceding the Civil War. Since the war, though increasing in volume, it has suffered steadily from the competition of the railways and has failed to keep pace in its rate of growth with either foreign or internal commerce.

No statistics of the value of either branch of domestic commerce are available, but it is doubtful if, at the present time, the value of the coastwise trade, exclusive of harbor and purely local traffic, is as great as the value of the foreign commerce of the nation; and it is certain that its value is far less than that of the tremendous internal trade carried on by rail. In one respect the coastwise trade retains a position of extreme significance. Being restricted to vessels built and owned in the United States, it has for several years provided the country with a merchant marine at a time when the tonnage of the national shipping engaged in foreign trade has declined to a comparatively small volume. It has made possible the existence of the shipbuilding industry and has given the nation virtually its only "nursery of seamen." It is as much because of these features as for its importance as a factor in commercial exchanges that the coastwise trade retains a large degree of interest.

---

[1]In addition to the references indicated, the writer of these chapters on the coastwise trade has consulted an unpublished history of the coastwise trade, written by Professor Thomas Conway, Jr., of the University of Pennsylvania.

An account of the development of the coastwise trade before 1789 is given in Chapter X. This chapter and the next will be devoted to a discussion of the coastwise trade of the Atlantic seaboard since 1789, and a third chapter will deal with the coastwise trade of the Pacific coast and the intercoastal trade.

LEGISLATION CONCERNING COASTWISE VESSELS.

By the provisions of the Constitution forbidding the individual States, without the consent of Congress, to levy export, import, and tonnage duties, the coastwise commerce of the United States was freed of the burdensome restrictions imposed upon it during the critical years from 1783 to 1789; and by the clause granting to Congress the power to regulate trade among the States and with foreign nations, the regulation of the coastwise trade was in effect vested entirely in the Federal Government. Acting under its authority to lay and collect taxes and duties, Congress passed, in July 1789, the first measure affecting the coastwise trade.[1] By this law, designed primarily for the purpose of raising revenue, all vessels built in the United States and owned by the citizens thereof, or vessels not built in the United States but belonging to the citizens thereof on May 29, 1789, and continuing in their possession, were required upon entry at any port of the country to pay a tonnage duty of 6 cents per ton; vessels built in the United States after the passage of the law and owned wholly or in part by foreigners paid a duty of 30 cents a ton; and all other vessels 50 cents a ton. It was provided, however, that vessels built and owned in the United States, while employed in the coastwise trade or fisheries, should not be obliged to pay tonnage duties more than once a year. All vessels not built and owned in the United States, when carrying products of the United States coastwise, should pay a duty of 50 cents a ton at each entry. The effect of this act was that, although foreign-owned and foreign-built vessels had a legal right to participate in the coastwise commerce of the United States, yet they were subjected to a discriminating tonnage tax that was virtually prohibitory.

On July 31, 1789, an act was passed establishing districts and ports for the collection of import and tonnage duties.[2] Massachusetts was divided into 20 districts, Virginia into 12, Maryland into 9, Georgia into 4, Connecticut, New Jersey, and South Carolina each into 3, New York into 2, and New Hampshire, Pennsylvania, and Delaware each constituted a single district. In each district certain regular ports of entry and delivery were designated. The entrance of North Carolina and Rhode Island into the Union made necessary the creation of additional customs districts in 1790, the former State being divided into 5 and the latter into 2; and at the same time the number of districts in New Jersey was increased from 3 to 4. In 1799 another readjust-

[1] *U. S. Statutes at Large*, I, 27. [2] *Ibid.*, 29.

ment was made, the number of districts in Massachusetts and New Jersey each being increased by 2, the number in Pennsylvania, Maryland, Connecticut, and Georgia by 1, and the number in Virginia being reduced from 12 to 11.

The "Act for registering and clearing vessels, regulating the coastwise trade, and for other purposes," passed September 1789, was the first important law of the new government dealing with the regulation of navigation and commerce.[1] The first part of this law contained rules concerning the registering of vessels, and the second part dealt with the unregistered vessels which might be employed in the coastwise trade or fisheries. The act stipulated that every unregistered vessel of a burden of 20 tons and upward built and owned in the United States, or not built in the United States but on May 16, 1789, wholly owned and continuing thereafter to be owned by a citizen or citizens of the United States, in order to secure the privileges of ships or vessels belonging to the United States, should be "enrolled" with the collector of the customs of the district in which the owner or one of the owners of the vessel resided. The masters or owners of such enrolled vessels, as well as the owners of registered vessels, were entitled to receive a yearly license to trade between the different customs districts. Before the license could be secured, it was necessary that the tonnage duty on the vessel be paid and that a bond of $1,000 be given that the vessel would not be employed in any illicit trade during the time for which the license was granted. All vessels of 20 tons or more, not provided with a certificate of registry or enrollment, and a license, which were found trading between different districts, were to be subject to the same tonnage duties as foreign vessels. The master of a vessel of less than 20 tons and not less than 5 tons burden employed in trade between different customs districts was required to secure a trading license from the collector of the district to which the vessel belonged and to give bond for the sum of $200 that the vessel should not be employed in illicit trade. The license for such vessels exempted them from entering or clearing for a period of one year.

The master of a vessel of 20 tons or more, licensed to engage in the coastwise trade and carrying a cargo of foreign goods of more than $200 value, or rum or other ardent spirits exceeding 400 gallons, was obliged, when proceeding from one district to another, to give to the collector duplicate manifests of the entire cargo of the vessel, one of which manifests was to be certified to by the collector and returned to the master of the vessel, together with a permit authorizing the vessel to proceed to its destination. Masters of licensed vessels bound from one district to another within the same State or from a district in one State to another in an adjoining State, having on board only products of the United States, rum and other ardent spirits exceeding

[1] *U. S. Statutes at Large*, I, 55.

400 gallons excepted, were not required to file manifests or to obtain a permit to sail. When licensed vessels of more than 20 tons were bound from one district to a district in any other State than the same or an adjoining State, the masters were required to file manifests of their entire cargoes and secure permits to sail, in the same manner as if they had cargoes of foreign commodities.

In 1790 the law relating to tonnage duties was revised. The scale of duties fixed the previous year was retained with respect to vessels entering from any foreign port or place. A duty of 6 cents per ton was to be paid on vessels of the United States entered in a district in one State from a district in another State, "other than in an adjoining State on the sea coast, or on a navigable river, having on board goods, wares and merchandise taken in one State to be delivered in another,"[1] but it was not to be paid more than once a year on vessels regularly licensed to engage in the coastwise trade. Upon foreign vessels entered in any district for the purpose of delivering goods consigned from another district a duty of 50 cents a ton was to be paid at each entry.

A brief experience with the act of 1789 concerning the registry and enrollment of vessels showed that the law was not sufficiently explicit in all its details and that a complete revision was necessary. Accordingly on December 31, 1792, a detailed statute[2] was enacted dealing with the registering and recording of vessels, and a few weeks later (February 18, 1793)[3] a law was enacted providing for a more comprehensive regulation of the coastwise trade. By the latter act only enrolled vessels possessing a license to engage in the coastwise trade, and vessels of less than 20 tons not enrolled, but licensed, were to be deemed vessels of the United States entitled to the privileges of vessels employed in the coastwise trade. Until June 1, 1793, vessels were to be enrolled in accordance with the terms of the law of September 1, 1789, but thereafter the qualifications for the enrollment of a vessel should be the same as for registry—that is, only those vessels could be enrolled which were built and owned in the United States; which were not built in the United States but were owned by a citizen or citizens thereof on May 16, 1789, and continued to be so owned thereafter; or which were condemned as prizes or forfeited for breach of the law and belonged wholly to a citizen or citizens of the United States. Registered vessels were permitted to engage in the coastwise trade, but they received a regular license only when their registers were exchanged for certificates of enrollment. Collectors of the customs were authorized to register any enrolled vessel upon the enrollment and license being surrendered. No license for carrying on the coastwise trade was to remain in force after the vessel to which it was granted was sold, altered, or transferred to some other employment. Unregistered vessels, not possessing a license, which might be found engaged in the

[1] *U. S. Statutes at Large*, I. 135. [2] *Ibid.*, 287. [3] *Ibid.*, 305.

coastwise trade, if laden only with goods produced in the United States (distilled spirits excepted), were to be subjected to the same tonnage duties as foreign vessels; if they had on board goods of foreign production or distilled spirits, other than sea-stores, they were to be forfeited. Furthermore, it was provided that, if any enrolled or licensed vessel should proceed on a foreign voyage without its enrollment being exchanged for a register, it should be liable to seizure and forfeiture. The owner and the master of a licensed vessel were required to give bond, varying in amount from $100 to $1,000, according to the size of the vessel, that the vessel would be employed in no trade whereby the revenue of the United States might be defrauded. The master was compelled to take oath that he was a citizen of the United States and that the license received should be used for no other vessel and for no other employment than that for which it was specially granted.

The regulations in regard to the entrance and clearance of vessels engaged in the coastwise trade were similar to those contained in the law of 1789. If a vessel, licensed to carry on coasting trade, bound from a district in one State to a district in the same or adjoining State on the seacoast or on a navigable river, had on board "either distilled spirits in casks exceeding 500 gallons, wine in casks exceeding 250 gallons, or in bottles exceeding 100 dozen, sugar in casks or boxes exceeding 3,000 pounds, tea in chests or boxes exceeding 1,000 pounds, or foreign merchandise in packages, as imported, exceeding in value $400, or goods, wares, or merchandise consisting of such enumerated or other articles of foreign growth or manufacture, or of both, whose aggregate value exceeds $800," the master was required to file with the customs collector duplicate manifests of the whole of "such cargo," and take oath that to the best of his knowledge the foreign goods were legally imported and the duties paid or secured, and that the excise duties on domestic spirits had been paid or secured. The collector certified one of the manifests and issued a permit for the vessel to proceed. On arrival at his destination the master was required, before unloading, to deliver the certified manifest and secure a permit to unload a part or the whole of the cargo, as desired. If a licensed vessel bound from a district in one State to a district in the same or an adjoining State did not have on board a cargo as above described, the master was not obliged to secure a permit to depart or to make any report of his arrival, though he was required to make out a manifest of his cargo, and exhibit it, upon demand, to the proper authorities.

If a vessel licensed to carry on the coastwise trade was bound from any district to a district other than one in the same or an adjoining State on the seacoast or on a navigable river, the master was required to give the collector at the port of departure duplicate manifests of his entire cargo; and if there were any distilled spirits or foreign wares on board, to specify in the manifests the marks, numbers, etc., of every package

ntaining the same, together with the names and addresses of shippers id consignees. When such manifests were filed, the processes of earing and entering were the same as described above for vessels ound to a neighboring district with a cargo for which it was necessary file manifests. Registered vessels in proceeding from district to strict were subjected to the same requirements as were enrolled and censed vessels.

The provisions of the act of 1793 concerning the enrollment and censing of vessels engaged in the coastwise trade are still in force. me modifications have been made in the law with respect to the tering and clearing of vessels, but on the whole there has been but tle change. An unfortunate feature of the act, which has always rsisted, is that it made no provision for collecting information in gard to the volume and value of the coastwise commerce of the untry. The manifests required of the masters of vessels contain ecific information concerning shipments of foreign merchandise or mestic spirits only, and it is not necessary that the quality or value of ese shipments be noted. Under these conditions government officials ive never been able to secure information concerning the character value of the coastwise traffic. It has been possible at some large rts to collect statistics of trade in such commodities as lumber, al, and cotton, which are shipped in cargo quantities, but for movements of highly diversified merchandise traffic, such as that between ew England and New York, it has been impossible to secure a satisctory statistical record.

DEVELOPMENT OF THE COASTWISE TRADE TO 1830.

Stimulated by the general revival of prosperity and aided by the mination of the restrictions placed on interstate commerce by adverse ate legislation, the coastwise trade of the United States, during the rly years of the new government, had a period of vigorous expansion. reign commerce became active once more, and the coastwise shipping und employment in the distribution of imported wares and in the llection at the large seaports of the commodities to be exported road, while the interchanges of domestic products gradually increased volume. In 1793, the first year in which the Treasury secured counts of the tonnage of the merchant marine, the enrolled and ensed vessels of the country had a total tonnage of 122,071, and by oo the tonnage had increased to 272,492.

The beginning of the cotton industry in the United States—the read of cotton culture in the South and the rise of cotton manucturing in New England—was an event of signal importance in the story of the coastwise trade. In a former chapter it has been exained how, during the colonial period, the coasting trade held a low nk as compared with other branches of American commerce, because

few commodities produced in one section of the country were consumed in large quantities in any other section. There was a certain degree of diversification of industry throughout the colonies, but there was no great intersectional demand for the leading products of the various groups of colonies.

With the establishment of the cotton industry this situation was changed and an intersectional trade began to develop which was to reach enormous proportions. Cotton was to become the pivot about which the major portion of the commerce of the United States, both foreign and domestic, was to revolve for a half century. The influence of cotton-culture on foreign and internal trade has been discussed in former chapters. Its effect on the coastwise trade was even more significant.

In both the foreign and the internal commerce of the South before the Civil War the movement of commodities was largely one-sided; a large volume of exports flowed out to foreign markets, but a comparatively small volume of foreign imports came directly into southern ports; immense quantities of foodstuffs and other domestic products came down the Mississippi River to be sold to the southern planters, but the movement northward on the river was relatively small. In the coastwise trade there was a heavy movement in both directions. Merchandise and manufactured goods of both foreign and domestic productions were carried coastwise from northern to southern cities, and there were large returning cargoes of southern cotton and tobacco, the shipments of the former constantly increasing in volume as manufacturing grew throughout the North. Furthermore, the volume of traffic northward was swelled by the shipments of food products from the Mississippi Valley, which were collected at New Orleans and sent to many points along the Atlantic coast. Until the trunk-line railroads were built to connect the seaboard cities along the Atlantic coast with the region west of the Appalachian Highland, a large part of the surplus farm produce of the central portion of the country found its way to consumers in the Eastern States by way of New Orleans. The treaty with Spain in 1795, by which the Mississippi River was opened and the "right of deposit" secured at New Orleans, and the purchase of Louisiana from Napoleon in 1803, were events of great importance in the development of the coastwise commerce.

Though conditions within the United States were highly favorable to the extensive growth of domestic trade during the first quarter of a century of the national period, the situation created by the European wars, which began in 1793, caused so great a diversion of activity to foreign commerce that the expansion of the coastwise trade was less than it probably would have been, had peace prevailed in Europe. A large portion of the capital of the country was invested in shipping employed in the foreign trade, and for a time the merchant vessels of the United States were the carriers for the entire world.

The following statement of the growth of the tonnage of vessels of the United States employed in the foreign commerce and in the coastwise trade shows the great relative importance of the foreign trade. Though the growth of the tonnage of enrolled and licensed vessels was not so great as that of registered vessels, nevertheless the increase was steady and uninterrupted. During the brief period of peace in Europe from 1801 to 1803 registered shipping declined almost 100,000 tons, but the coasting fleet during the same period increased at a normal rate.

TABLE 38.—*Tonnage of vessels of United States in foreign and coastwise trade, 1793–1810.*

Year.	Foreign trade tonnage.	Coastwise trade tonnage.
1793	367,734	122,071
1795	529,471	184,398
1800	667,107	272,492
1805	744,224	332,663
1810	981,019	405,347

The embargo and non-intercourse acts and other measures by which the United States endeavored to compel Great Britain and France to show a greater degree of respect for the rights of neutral commerce not only put an end to the prosperity of the foreign trade, but also crippled the coastwise trade of the United States. The most important portion of the coastwise commerce still consisted of the distribution of imports and the collection of commodities for export, and when foreign commerce was cut off, the coastwise trade was made to suffer. However, the burden was not so heavy upon the coasting business as upon the foreign trade. Domestic trade in products of the United States was not interdicted, and the volume of exchange in trade of this character was necessarily made larger by the prohibition of commerce with other nations.

The termination of commerce with Great Britain encouraged the development of manufactures in the United States, and a thriving trade arose in the products of the new manufacturing industries and in raw materials. Cotton manufacturing in particular had a notable development, and the trade between the North and South expanded rapidly. Gallatin, in his *Report on Manufactures* in 1810, stated that at the end of the year 1809 he had received reports from 87 cotton mills, 62 of which were in operation, working 31,000 spindles. This probably represented a sixfold increase of cotton manufacturing in the space of four years. In 1811 it was estimated that the investments in cotton mills in the United States amounted to $4,800,000 and that these mills consumed 3,600,000 pounds of cotton, worth $720,000.

The growth of manufacturing stimulated both the local and the long-distance coastwise business along the entire Atlantic seaboard. Besides profiting from the expansion of purely domestic business, a portion of the coasting fleet found remunerative employment by circumventing the

laws restricting foreign trade. Many vessels engaged ostensibly in the coastwise trade sailed to Nova Scotia, Florida, or the West Indies, where their cargoes were sold or transferred to foreign vessels and carried to Europe. Several laws were enacted for the purpose of putting an end to this illicit commerce, but it was impossible to stop it completely.

The War of 1812 virtually put an end to all commerce of the United States carried on by sea. Shortly after the war started, the British Government declared a blockade of the entire coast of the United States with the exception of Massachusetts. An embargo laid by Congress in December 1813 closed the ports of the whole country to trade, and in April 1814 the British blockade was extended to include every port of the United States from New England to Louisiana. British war vessels waited along the coast ready to seize any vessel attempting to carry on commerce with blockaded ports. Occasionally the rigor of the blockade was relaxed, and a small local coastwise trade became possible, but most of the time the risk of capture was too great for any vessel flying the flag of the United States to put to sea. Deprived of maritime commerce, the people of the United States attempted to carry on by land a part of the trade which formerly had been borne by the coastwise fleet, the enormous prices which many articles commanded making possible a wagon trade between points as widely separated as Savannah and Boston. Flour, for example, which sold at Richmond for $4.50 per barrel, brought $11.87 in Boston; the price of rice in Charleston and Savannah was $3 per hundredweight and in Boston $8; upland cotton, which could be bought for 9 cents a pound in Savannah, sold in Boston for 20 cents.[1] The wagon trade, however, was insignificant in volume compared to coastwise commerce carried on in times of peace, and it was with a feeling of great joy that the people witnessed the end of the war and the return of trade to its normal channels.

The greatest lesson which the war taught the people of the United States was the necessity for taking steps to render the nation more nearly self-sufficient. The encouragement of manufacturing industries which could consume raw materials of domestic production and supply at least a portion of the commodities for which it had been customary to rely entirely upon foreign producers, the construction of roads and canals by which internal communication could be carried on, and the building of a navy large enough, at least, to protect the coasting trade—these projects in particular appealed to political leaders as wise measures to be taken for the defense of the people, in case a conflict with a foreign power should again occur. For the first time the people saw the importance of having a greater diversification of industry in the country, and for the first time a definite policy was adopted looking to the

[1] *Niles' Register*, V, 41; see McMaster, *History of the People of the United States*, IV, 218, for a very interesting account of the wagon trade during the war of 1812.

development of domestic commerce and the creation of a home market for domestic products. So strong was the feeling of need for economic self-sufficiency as a means of national defense, that all sections of the country united in supporting measures whereby the desired improvement could be realized. Even Calhoun lent his support to the tariff law of 1816 as the only practicable means of preventing the wealth and vigor of the nation from becoming impaired during a time of war.

Next to the inauguration of the protective tariff policy, the passage of the navigation act of 1817 was the most important part of the new program of economic legislation.[1] Two sections of this act dealt with the coastwise trade: One, which still remains in force, provided "that no goods, wares, or merchandise shall be imported under penalty of forfeiture thereof, from one port in the United States to another port in the United States, in a vessel belonging wholly or in part to a subject of any foreign power;" the other stipulated that the tonnage duty on vessels licensed for the coasting trade should be 6 cents a ton, only if the master and three-fourths of the crew should be proved to be citizens of the United States; otherwise the duty should be 50 cents per ton. By this law foreign vessels were entirely excluded from the coastwise trade, and the building up of a merchant marine owned by domestic capital and manned by citizens was insured.

The abnormal conditions of the foreign trade immediately following the conclusion of peace imparted a great stimulus to the coasting trade. A large part of the tremendous volume of manufactured goods and merchandise which poured into the leading ports of the United States in 1815 and 1816 was loaded on coasting vessels and distributed along the entire seaboard. From Portland to New Orleans the country was flooded with all classes of foreign goods imported chiefly into New York, Boston, Philadelphia, and Baltimore. The infant manufacturing industries were soon stifled, and trade in domestic products languished, but the loss was more than compensated for by the activity in the distribution of imported wares. The industrial and commercial depression which came in the wake of the period of extravagant overtrading brought distress to the coastwise commerce, though the depression does not appear to have been so severe as in most of the other branches of trade and industry. From 1818 until 1825 there were only two years in which there was not an increase in the tonnage of the coastwise fleet, and the total increase for the five years amounted to 90,000 tons.

An event of importance to the coastwise commerce was the enactment of the law of 1819 establishing the "great districts." By this law all customs districts, so far as concerned vessels of more than 20 tons which were regularly licensed to engage in the coastwise trade, were abolished, and in their place the seacoast and navigable rivers

[1] *U. S. Statutes at Large*, III, 351.

of the United States were divided into "two great districts, the first to include all the districts on the seacoast and navigable rivers between the eastern limits of the United States and the southern limits of Georgia, and the second to include all the districts on the seacoast and navigable rivers between the river Perdido and the western limits of the United States." After the passage of this act regularly licensed vessels of more than 20 tons burden proceeding from a collection district to another in the same great district, or from a State in one great district to an adjoining State in another great district, were subject to the regulations imposed by the law of February 18, 1793, or vessels trading from one district to another in the same or in an adjoining State, and if proceeding from one great district to another, except when the ports of departure and destination were in adjoining States, were subject to the rules imposed in 1793 on vessels trading from a district in a State to a district not in the same or an adjoining State. The regulations with respect to licensed vessels of less than 20 tons were not changed. In 1822 the newly acquired territory of Florida was designated as a third "great district."

These laws gave a much greater degree of freedom to the coastwise trade. Any enrolled vessel could go from Maine to Georgia without any report of its departure or arrival being made, provided its cargo did not include the commodities listed in the act of 1793. No change was made as to the nature of the manifests required of the masters of vessels, and the difficulty of securing statistical information concerning the coastwise trade became greater than ever.

During the time of recovery from the severe depression of 1818–19, the people of the United States began to give more consideration to problems of purely domestic concern. Before the War of 1812 the most important political questions confronting the nation were problems growing out of foreign relations, and the chief economic interest seemed to be the development of the foreign trade. The time had now come for the people to realize that their paramount economic and political problems were internal and not external; that their absorbing interests were at home and not abroad. The decade from 1820 to 1830 was singularly full of occurrences which indicated that the nation had at last come to realize the new state of affairs. Possibly no other single decade of the history of the country has contained as many events so full of economic significance. The enunciation of the Monroe Doctrine indicated a definite separation from political entanglements with the Old World; the Missouri Compromise marked the opening of a struggle that was to shape political history for half a century; the tariff laws of 1824 and 1828, the completion of the Erie Canal, and the introduction of the steam locomotive evidenced the beginning of a determined effort to develop the resources and industries of the country in such a way that it would achieve economic as well as political independence.

NATURE AND VOLUME OF THE COASTWISE TRADE IN 1830.

With the adoption of the "American system," population increased, manufacturing and agriculture developed, and domestic commerce began to expand with surprising vigor. Of the two branches of domestic trade, the coastwise and the internal, the former was until after the Civil War the more important. The sea offered the best means of communication between the most populous parts of the country, and the value of the traffic carried coastwise was greater than the value of the traffic transported on the railroads, rivers, lakes, and canals. One of the most significant features of the coastwise trade during this period was, that in 1831 the tonnage of enrolled and licensed vessels employed in the coasting trade for the first time exceeded the tonnage of registered vessels employed in the foreign trade.[1] In 1810 the tonnage of the latter was more than twice that of the former. The development of the coastwise trade for a score of years sufficed to give its fleet a position equal to that of the shipping engaged in foreign trade. In only two years since that time, 1856 and 1857, has the tonnage of the coasting fleet been smaller than that of the foreign-trade shipping of the country. Of the exports and imports of the United States in 1831 the percentage carried by shipping belonging to the country was 86.5. Making allowance for the greater number of trips that could be made by the coasting vessels, it may be safely estimated that the value of the coastwise commerce was much greater than that of the foreign trade, which amounted at that time to $185,000,000.

What the general character of the coastwise trade was in 1830 has been indicated before. By this time cotton had become the great product of the South, and from both the South Atlantic States and the Gulf States this commodity was shipped in large quantities to the North Atlantic ports, some of it to be distributed among the cotton manufacturers of the North and some to be exported abroad. Rice, tobacco, and naval stores from the South Atlantic States and sugar and molasses from Louisiana were shipped to northern markets, and large quantities of the produce of the Mississippi Valley—tobacco, whisky, hams, bacon, pickled pork and beef, lard, cheese, butter, flour, corn, and wheat—were transported from New Orleans to all the States along the Atlantic seaboard. From the Northern to the Southern States were shipped manufactured goods and merchandise of all kinds of both foreign and domestic production—dry goods, wearing apparel,

[1] The statistics in the annual *Report of the U. S. Commissioner of Navigation* show that the tonnage employed in the coasting trade first exceeded that employed in the foreign trade in 1821. However, the excess of the former in that year was not real. In 1818 a reduction of over 200,000 tons was made in the registered tonnage by striking off all vessels the registration of which had been granted before 1815, which were supposed to have been condemned, lost at sea, or captured. No correction was made at that time in the enrolled and licensed tonnage, and as a result the statistics were incorrect until 1829, when a correction was made in the tonnage of all classes of vessels. The result was a shrinkage of over 300,000 tons in the tonnage of the coasting fleet, which brought its total to a smaller amount than the tonnage of the registered vessels engaged in foreign trade. It is extremely probable that if both lists had been corrected in 1818, the statistics would have shown the tonnage of the registered shipping to have been greater than that of the coasting fleet each year until 1831.

e of Mobile expanded
Alabama was shipped
se to New Orleans and
ber to other points in
l of staves to New York
rkets, helped swell the

TO 1850.

ere was little change in
the Atlantic coast—that
d in the direction of the
t sections of the country.
general character of the
volume. As the popula-
of acres of new farm lands
and as manufacturing and
wing quantity of products
endeavored to improve its
d as railways and canals
of commodities was carried
other ports of the United
ndustry became more pro-
gree of mutual dependence
and adding to the volume of
in value from $134,000,000
e the major portion of the
ors, the coastwise commerce
of distribution. By far the
h were marketed in the North
ere was a continuation of the
area of the Mississippi Valley
leans.

New York Bay with the Gulf of
etitor for the traffic between the
ward water-route capture a very
ppi River. By far the largest part
and West over the Erie Canal rep-
ion to the total domestic commerce
quate railway connection was estab-
d the Atlantic seaboard in the sixth
of the commerce of the Central
n to the eastern coast, and it
erland movement by rail
nto the coastwise trade.[1]

shipments of coal grew from 200 tons to 63,000 tons.[1] An interesting feature connected with the coal trade was the beginning of the coastwise ice trade from Maine to Philadelphia about 1828. Vessels taking coal to New England returned with cargoes of ice, thus securing a return freight. The ice traffic increased rapidly, though there are no statistics indicating its exact extent.[2]

The coastwise trade of Baltimore was also extensive. Numerous cotton-mills were in operation in the city, as well as rolling-mills and flour-mills, all of which contributed a large volume of products to be distributed to neighboring States. Baltimore was also the center of a large tobacco trade, though the outbound shipments coastwise were small as compared to the foreign exports.

The greater part of the coasting trade of New England centered at Boston. Probably more than one-half of the cotton consumed in the United States was shipped to Boston for distribution among the New England spinners, and in addition to this product the city received hemp, sugar, molasses, tobacco, and naval stores from the South; grain, flour, provisions, and imported goods from New York; agricultural products and coal from Philadelphia; and lumber from Maine. In return, Boston exported coastwise large quantities of manufactured cotton and woolen goods, shoes, furniture, fish, and rum. The growing manufacturing city of Providence purchased large quantities of cotton, foodstuffs, and lumber, and sold manufactures of various kinds. Virtually every port of New England possessed a fishing industry, which was the basis of a local coastwise trade of greater or less extent, most of the business centering around Boston.

In the South Atlantic States, Charleston and Savannah were the leading ports, though Wilmington, Norfolk, and Richmond had each a trade of considerable volume. Cotton and rice made up the major portion of the exports of the South Carolina and Georgia cities, the coastwise shipments going chiefly to New York, Providence, Boston, and Philadelphia, in return for which came grain, flour, provisions, imported goods, and miscellaneous manufactures for the planters of the eastern cotton belt. An eager and strenuous conflict was being waged by these two cities for the wholesale and retail trade of the interior. During the early part of the century Charleston had held first place, but with the introduction of steam navigation on the Savannah River the Georgia port had been able to capture a part of the trade formerly belonging to Charleston merchants and was soon challenging the South Carolina city for the lead.

On the Gulf coast, New Orleans held the undisputed lead in domestic trade and also possessed a greater foreign export trade in domestic products than any other city in the country. Like all other southern seaports, New Orleans received a relatively small proportion of her foreign imports direct from the producing country, securing a large part of them coastwise from the North Atlantic ports, together with cargoes of domestic manufactures.

[1] Taylor, *Statistics of Coal*, 305. [2] *Ibid.*, XXXIV, 1828, p. 288.

With the settling of Alabama the commerce of Mobile expanded rapidly. A large part of the cotton crop of Alabama was shipped from this port, much of it being carried coastwise to New Orleans and to the Northern States, and shipments of lumber to other points in the Southern States and to the West Indies, and of staves to New York and to other domestic as well as foreign markets, helped swell the volume of the commerce of this growing city.

THE COASTWISE TRADE FROM 1830 TO 1850.

During the two decades following 1830 there was little change in the general character of the coastwise trade of the Atlantic coast—that is, in the nature of the traffic exchanged and in the direction of the movement of the commodities of the different sections of the country. But while there was little alteration in the general character of the trade, there was an enormous increase in its volume. As the population of the country increased and thousands of acres of new farm lands in both the North and South were occupied, and as manufacturing and mining industries expanded, a constantly growing quantity of products was available for exchange. Each seaport endeavored to improve its transportation system to the interior, and as railways and canals multiplied in number, an ever-rising volume of commodities was carried to the coast to be transported abroad or to other ports of the United States. The sectional diversification of industry became more pronounced than before, creating a greater degree of mutual dependence between different portions of the country and adding to the volume of intersectional trade. Foreign trade rose in value from $134,000,000 in 1830 to $318,000,000 in 1850, and since the major portion of the imports continued to enter northern harbors, the coastwise commerce was constantly augmented by the work of distribution. By far the largest part of the southern products which were marketed in the North was carried by the coasting fleet, and there was a continuation of the movement of farm produce from a large area of the Mississippi Valley to the Atlantic States by way of New Orleans.

The canal and river system connecting New York Bay with the Gulf of Mexico did not figure greatly as a competitor for the traffic between the East and the South, nor did the eastward water-route capture a very large amount of traffic from the Mississippi River. By far the largest part of the traffic flowing between the East and West over the Erie Canal represented new trade and was an addition to the total domestic commerce of the country. It was not until adequate railway connection was established between the Mississippi and the Atlantic seaboard in the sixth decade of the century that a large volume of the commerce of the Central States was actually diverted from the southern to the eastern coast, and it was not until after the Civil War that the overland movement by rail from the South to the North began to cut heavily into the coastwise trade.[1]

[1]See chap. x.

The best index of the growth of the coastwise trade from 1830 to 1850 was the increase of the tonnage of the coasting fleet from 516,979 tons to 1,797,825 tons. Of the tonnage in 1850, 1,755,797 tons consisted of enrolled vessels of more than 20 tons burden, and 42,028 tons consisted of small licensed craft. A part of this tonnage was made up of vessels engaged in the trade of the Great Lakes and the western rivers. The enrolled tonnage of the lake district in 1830 amounted to about 9,000 tons. In 1850 the enrolled tonnage of the lakes and western rivers was 300,000 tons, and on the Pacific coast there was a fleet of enrolled and licensed vessels amounting to 2,500 tons. By far the largest part of the coastwise fleet, however, operated on the Gulf and Atlantic coasts.[1]

While there are no statistics of the coastwise trade for comparison with those of the foreign trade, there may be found various accounts which indicate the conditon of the trade of certain cities. New York, with the best transportation system to the interior and a superior financial and mercantile organization, easily led in both domestic and foreign trade. Over two-thirds of the imports of the nation in the decades 1830 to 1850 entered the harbor of New York, and a large part of the surplus products of New England, the Middle Atlantic States, and the lake district were collected at this city, all helping to swell the coastwise business and giving New York the unquestioned leadership in the distribution of merchandise to domestic markets. The cotton receipts at New York by 1850 were exceeded by the receipts at only two other cities in the country, New Orleans and Mobile, and only three cities, the two just named and Charleston, had foreign cotton exports exceeding those of the great northern seaport. The receipts of cotton at New York in 1846 amounted to 311,418 bales, of which 134,506 bales were exported abroad.[2] Coal from Philadelphia and Baltimore, sugar and molasses from New Orleans, rice from South Carolina and Georgia, tobacco from Virginia, and manufactured goods from all the new England and Middle States made up a large part of the coastwise imports of New York.[3]

The growth of the coastwise business at Boston is shown by the increase of the entrances and clearances of coastwise vessels from 5,244 in 1830 to 9,064 in 1850.[4] These statistics are of course inaccurate,

---

[1]These statistics, taken from the annual *Report of the U. S. Commissioner of Navigation*, are not entirely reliable. Many registered, enrolled, and licensed vessels were continued in the records of tonnage, after they were lost or condemned. No important correction was made between 1829 and 1856. Hence the figures showing the annual tonnage of the merchant marine are unquestionably too large, the amount of error increasing each succeeding year.

[2]*Hunt's Merchants' Magazine*, XV, 1846, p. 396; XVII, 1847, p. 410. The receipts of cotton at New York from various southern points (in 1846) were as follows:

	bales.		*bales.*
New Orleans	54,076	South Carolina	57,442
Mobile	44,714	North Carolina	9,306
Florida	56,196	Texas	7,457
Georgia	62,807	Virginia	2,927

[3]*Ibid.*, XXII, 1850, p. 331. [4]*Ibid.*, VI, 1842, p. 184; XX, 1849, p. 214; XXIV, 1851, p. 225.

as many vessels from both near and distant ports entered and cleared, for which no record was kept. The receipts of cotton at Boston increased from 46,203 bales in 1830[1] to 270,593 bales in 1849, and the receipts of flour, a large part of which entered coastwise, grew during the same period from 309,997 barrels to 987,988 barrels. New England by 1850 had made great progress in manufacturing, and raw materials for factories and food and fuel for the rapidly growing urban population were secured in a large measure from other sections of the country, in exchange for manufactured goods, fish, ice, and lumber.

The cities of Philadelphia and Baltimore had a much greater degree of prosperity in domestic than in foreign trade. The shipments of anthracite coal from Philadelphia rose from 63,000 tons in 1830 to 1,075,000 in 1850.[2] The vessel tonnage employed in the transportation of Philadelphia coal was greater than the tonnage employed in the transportation of any other single domestic product. The Susquehanna and Tidewater Canal gave Baltimore a share of the anthracite coal trade, and the opening of the Cumberland coal field, made possible by railway and canal construction, gave Baltimore also a large coastwise trade in bituminous coal. A description of the commerce of Philadelphia contained in *Hunt's Merchants' Magazine*[3] in 1846 contains a typical picture of the coastwise trade of the cities of the Middle States during this period.

". . . a considerable proportion of the foreign merchandise which supplies its [Philadelphia's] warehouses is brought into the port of New York, and is thence transported to its harbor, either by railroads and steamboats, or by vessels in the coastwise trade. Many foreign goods, besides manufactures of cotton and wool, shoes, bonnets, fish, oil, and other products of the industry of the more northern States, are received from New England, and a large amount of goods from England, France, China, and the principal nations of Europe, is here landed from New York. To the neighboring State of New Jersey she sends coal, lime, and iron, as well as various other products of her own manufactories, and her coal, flour, wheat, and corn to New York and the New England States. Besides, she transports to the adjoining States the products of New England, the manufactures of cotton, wool, leather, and iron. Agricultural products are introduced from New Jersey, and Delaware sends its flour, cornmeal, wheat, and corn to the port of Philadelphia. Although the exports to Virginia are moderate in their amount, yet Philadelphia receives from that State tobacco, cotton yarn, wheat, corn, and bituminous coal. Naval stores, cotton yarn, cotton, and lumber are received from North Carolina, cotton and rice from South Carolina and Georgia, and cargoes of cotton from Alabama.

"A considerable amount of cotton, sugar, and molasses is received from Louisiana, the products of that State, which, in return, imports a portion of the manufactures of Pennsylvania and New England for its own consumption. Heavy goods, to a large amount, are, however, sent from the port of Philadelphia to the Western States, by the way of New Orleans, and there is here received, in return by the same track, considerable quantities of cotton, tobacco, hemp, pork, lard, lead, and the like products from those States."

[1] *Niles' Register*, XLIV, 1833, p. 40. [2] Taylor, *Statistics of Coal*, 405. [3] XIV, 1846, p. 428.

None of the South Atlantic ports experienced the degree of prosperity enjoyed during the two decades from 1830 to 1850 by the cities of the North. The eastern part of the cotton-belt failed signally to keep pace in material development with other sections of the country, the increase of population being very small, and the expansion in industry and commerce relatively unimportant. Charleston and Savannah continued their struggle for commercial supremacy, neither city gaining a decisive advantage. In both the foreign and coastwise trade of these cities the outbound shipments of cotton, rice, and naval stores grew slightly in volume, and there was a corresponding increase in the receipts of manufactured goods and merchandise. Savannah, handicapped on account of being located on a somewhat shallow river several miles from the sea, had a smaller foreign trade than Charleston. In fact, part of the cotton marketed at Savannah was carried coastwise to Charleston for exportation.

In contrast to the lack of development in the eastern cotton belt, the western belt prospered highly. As the production of cotton and sugar increased, and the shipments down the Mississippi River rose in volume, the foreign and coastwise trade of both New Orleans and Mobile rapidly expanded. The coastwise shipments of cotton from New Orleans grew from 63,000 bales in 1831 to 214,000 bales in 1850[1] and those from Mobile increased from 54,000 bales to 129,000 bales during the same period.[2] The coastwise sugar and molasses trade of New Orleans grew at even a more rapid rate than the cotton trade;[3] the shipments of grain and provisions did not grow as rapidly, not because of any falling off in receipts, but because of greater local consumption. Lumber continued to occupy an important place in the trade of Mobile, the coastwise shipments amounting in 1850 to nearly 5,000,000 feet.[4] A large part of the food supplies entering Mobile came from New Orleans, while manufactured goods and merchandise were purchased chiefly in northern markets.

It is, unfortunately, impossible to give a statistical statement of the total value of coastwise trade at any year. An estimate in Andrews's *Report on Colonial and Lake Trade* gives the gross value of the various branches of domestic commerce in 1852 as follows: Coasting trade, \$3,319,039,732; canal commerce, \$1,188,000,000; railway commerce, \$1,081,500,000. The "coasting trade" included the commerce of the lakes and western rivers, which, according to an estimate for 1851, amounted in value to \$653,976,202. Deducting this sum, the commerce carried on along the seacoast had a value of about \$2,600,000,000. It is of interest to note that the coastwise trade was considered by far

[1] *Hunt's Merchants' Magazine*, IX, 1843, p. 375; XIX, 1848, p. 503; XXIII, 1850, p. 536; Hall, *Statistics of the West*, 280.
[2] *Ibid.*, XIII, 1845, p. 422; XXI, 1849, p. 555; *DeBow's Review*, XX, 1856, p. 446.
[3] *Hunt's Merchants' Magazine*, XV, 1846, p. 494; XXIII, 1850, p. 659.
[4] *Ibid.*, XXV, 1851, p. 736.

the most valuable and important portion of the domestic trade and that its estimated value was more than six times the value of the foreign trade of the nation.

THE DECADE FROM 1850 TO 1860.

The most prominent feature of the history of the coastwise trade between 1850 and 1860 was the diversion of a large amount of traffic from the sea to the railroad. In the northern section of the country four trunk-line railways had, by 1852, established through connection with the Mississippi Valley and the basin of the Great Lakes. No sooner was this accomplished than the agricultural and mineral products of the Central States, which had formerly found their way to markets in the East by way of New Orleans, were diverted from the Mississippi River and shipped directly eastward over the new transportation routes. This change constituted a distinct loss both to the river and to the coastwise commerce. In the South a similar transformation was effected. The westward extension of the railway lines reaching inland from Charleston and Savannah made it possible for the planters of South Carolina and Georgia to secure by rail the food supplies which previously had come coastwise from New Orleans or from Philadelphia and Baltimore. However, the loss to the coastwise trade occasioned by this change was partially compensated for by the opportunity now given to Charleston and Savannah to compete with New Orleans and with such inland cities as St. Louis, Louisville, and Cincinnati for the merchandise trade of the people of Alabama and Tennessee. The westbound shipments made by the merchants of the South Atlantic ports were first received coastwise from the North, and to whatever extent they competed successfully against the goods coming from St. Louis and the cities on the Ohio River, a distinct gain was made in the coasting trade of the Atlantic seaboard.

Though these were the most striking instances of railway competition, they were by no means the only ones. All along the Atlantic coast the local traffic between seaboard cities was beginning to abandon the water route for the safer and more speedy method of rail transportation. Abundant signs were in evidence that the time was coming when the coastwise trade, so long the most important factor in domestic commerce, was to be relegated to an inferior position. Even the shipments of cotton by rail from the South to the North began during this decade, as well as the shipment by rail of merchandise and foodstuffs from the North to the South. The water routes between the two sections of the country were being gradually paralleled by rail lines, and competition between rival routes was already beginning to result in the development of the peculiar "basing-point" system of railway rates in southern territory.

Notwithstanding the encroachment of the railroad upon transportation by water, however, the coasting trade during the decade from 1850 to 1860 had a large growth. The foreign imports of the country grew from $174,000,000 to $354,000,000 and exports from $144,000,000 to $334,000,000. The city of New York alone imported more in 1860 than the entire United States imported in 1850. The addition to the coastwise trade resulting from the growth of imports would probably have been enough to compensate for any loss due to the changes in the movement of domestic trade. The number of bales of domestic cotton consumed in northern mills rose from 404,000 in 1851 to 760,000 in 1859,[1] and there was a constant increase of the quantity of northern manufactures consumed in Southern States. The coastwise coal trade doubled in volume, the ice trade of New England grew rapidly, and the shipment in the late winter and early spring of all kinds of vegetables and fruits from such points as Norfolk, Richmond, and Wilmington (North Carolina) became an important factor in the trade of these ports. Probably the best index of the growth of the coastwise trade during this decade was the increase in the tonnage of the merchant marine employed. Twice during the decade extensive corrections were made in the government statistics by striking off a large number of vessels which had been lost or condemned but had not been stricken from the list, but notwithstanding these corrections the fleet of enrolled vessels on the Atlantic coast grew from 1,450,000 tons to 2,100,000 tons, the largest increase made in a single decade up to that time.

A notable feature of the decade was the growth in the number of the steamship lines engaged in coastwise trade. By 1832 New York had regular semi-monthly communication with Charleston, Savannah, and Florida by the New York and Charleston United States Mail Steamship Line, which had four vessels in commission, with an aggregate tonnage of 6,200. Two steamers of this same line offered regular service between New York and New Orleans, while the New York and Alabama Steamship Company, with one vessel, afforded competing service from New York to New Orleans, Mobile, and Havana. The New York and Savannah Steamship Company, with two steamers in commission and a third under construction in 1852, offered weekly service between New York and Savannah, and weekly accommodation, connecting New York, Petersburg, Norfolk, and Richmond, was afforded by the New York and Virginia Steamship Company. In all there were 17 steamers engaged in regular service between New York and the South in 1852, the ports reached being eight in number—Charleston, Mobile, New Orleans, Savannah, Jacksonville, Richmond, Petersburg, and Norfolk.[2] Lines were established between Charleston and ports in Georgia, Florida, and North Carolina; a daily service was offered between Mobile and New Orleans; and vessels plied regularly between

[1] *Statistical Abstract of the United States*, 1912, p. 778. [2] *DeBow's Review*, XIV, 1852, p. 576.

New Orleans and Galveston and other Texas ports. At the end of the decade New York was connected by the Atlantic and Pacific Steamship Company with New Orleans, Havana, Aspinwall, and California, and other important lines, such as the Southern Steamship Company and the Cromwell Line, offered service touching at all the important points south of New York.[1] In New England the regular coastwise service was even more highly developed than along the other parts of the coast.

In the long train of events and circumstances leading up to the Civil War the coastwise trade occupied an interesting position. To the southern leaders the coastwise trade seemed continually to present concrete evidence of what they believed to be their great grievance, namely, that the North profited at the expense of the South. Why should the South, contributing two-thirds of the exports of the nation, be compelled to buy its necessities from northern merchants, market its crops through northern brokers and bankers, and pay tribute to northern ship-owners? For the most part, the South attributed to the action of the Federal Government its condition of dependence, and furthermore felt not only that it was being discriminated against, but that, inasmuch as most of the revenue of the Federal Government was derived ultimately from southern consumers, the South was being compelled to support the government by which its oppression was accomplished. It is an all but universal failing to attribute economic conditions to political policies, and in the United States the tendency to do this has always been strong. The people of the South felt that if the Union were dissolved there would be a satisfactory readjustment of their economic situation, and they looked upon their large and valuable commerce as a prize which would secure ready European aid for their cause.[2] The idea that their great coastwise commerce could be transformed into direct trade with a foreign ally added to their determination to open the conflict and gave them an increased measure of confidence as to its issue.

[1] *Hunt's Merchants' Magazine*, XLIII, 1860, p. 110.
[2] *Callender, Economic History of the United States*, 124.

CHAPTER XX.

THE COASTWISE TRADE OF ATLANTIC AND GULF COASTS SINCE 1860.

Changes in the coastwise trade after the Civil War, 348. Effects of competition between the railroads and the coastwise carriers, 349. Decline of New Orleans in the coastwise trade, 350. Development 1880 to 1900, 351. Incompleteness of Government statistics of coastwise trade, 352. Act of 1906 establishing five "coastwise districts," 353. Growth of coastwise trade from 1900 to 1912, 353. Coastwise entrances at New York and Boston in 1902 and 1911, 354. Ownership of coastwise lines by railroad corporations, and proposed regulation of coastwise carriers by the Federal Government, 356.

The outbreak of the Civil War put a stop to the coastwise trade between the North and the South and, with the exception of a small trade carried on by northern shippers at a few southern ports captured and held by the Union forces, there was virtually no commercial intercourse between the warring sections of the country for a period of four years.

The South, moreover, besides being deprived of trade with the North, was also compelled to witness the almost total suspension of the local coastwise trade and the large foreign trade, both of which were effectively crippled by the blockading vessels of the Federal navy.

The North lost the valuable coastwise trade previously carried on with the Southern States, but the loss was partially compensated for by the vigorous growth of the foreign trade. There is little information available concerning the local coastwise trade of the Northern States during the war. The partial stagnation in the cotton-manufacturing industry resulting from the interruption of cotton shipments from the South doubtless injured local trade somewhat, but it is likely that the total volume of the local business increased by reason of the growth of other manufacturing industries and the prosperous state of the foreign trade.

CHANGES IN THE COASTWISE TRADE AFTER THE CIVIL WAR.

The end of the war brought an immediate resumption of domestic trade, and though it was apparent that some time must elapse before the Southern States would recover sufficiently from the devastation and havoc wrought by the conflict to regain the commercial prosperity of former years, yet the energy with which productive activities were undertaken indicated that recovery would be rapid. It was thought in some quarters that the domestic trade would, for the most part, return to the channels in which it had flowed previous to the war, and that the coastwise trade would again assume a position of dominant importance, but this was not to be. Even before the war broke out there had been ample evidence that the railroad was to become the most important factor in domestic trade. While the war was in progress, the effectiveness of the railroad had been displayed in the car: age to the Atlantic

seaboard of western farm produce for which the market in the South had been destroyed. No sooner was the war over than a period of great activity in railway construction began, and within a remarkably short time all parts of the country, especially in the region east of the Mississippi River, were linked together by a network of railway lines which became active and successful competitors for the transportation of a large portion of the traffic carried by the coastwise fleet.

The competition of the railroads brought about a fundamental change in the character of the coastwise trade along the Atlantic coast. While transportation by natural waterways is cheaper than transportation by rail, yet the cost of carriage of most merchandise traffic adds so little to the price that merchants and consumers can, as a general rule, well afford to pay the somewhat higher charge for rail transportation in return for the greater speed and safety with which traffic can be moved. As a result, where there is a choice of rail and water routes, by far the largest portion of valuable traffic is shipped by rail. However, a water route is often used, where available, for the carriage of bulky freight, the price of which is strongly affected by the cost of transportation. As a result of the competition of the railroads with the carriers by water along the Atlantic coast, the merchandise traffic for the most part abandoned the water route, leaving the freight moving coastwise to consist largely of bulky raw materials such as coal, lumber, iron and steel, cement, stone, and sand.

It must not be supposed that the coastwise trade diminished in volume. As a matter of fact, it has grown steadily since the Civil War, but the rate of increase has been smaller than it was before the war, and the growth has been almost insignificant as compared with the tremendous expansion of the traffic carried by rail. Neither must it be thought that the coastwise trade has suffered the entire loss of the general merchandise traffic. Line service has been maintained between all the important ports of the Atlantic coast, and large quantities of general merchandise freight, as well as a large number of passengers, are carried annually by the vessels operated in such lines. In fact, the miscellaneous manufactured goods and general merchandise, together with the cotton, canned goods, ice, naval stores, and farm products carried by the regular steamship lines constitute, from the standpoint of value, the largest portion of the coastwise traffic, though in volume this traffic is exceeded by the bulky freight carried both by line and chartered vessels. The total traffic is by no means small. The Census Report on *Transportation by Water* shows that in 1906 the total volume of coastwise traffic on the Atlantic and Gulf coasts, exclusive of harbor traffic, was 63,773,169 tons, of which over 41,000,000 tons consisted of coal, lumber, stone, sand, and miscellaneous minerals and mineral products.[1] So far, however, had the coastwise traffic of the Atlantic

[1] U. S. Census Report, *Transportation by Water, 1906*, pp. 73, 75.

and Gulf coasts fallen in relative rank, that it was only one-fourteenth as great as the volume of traffic originating on the railways of the country. Even the traffic of the Great Lakes was larger than that comprised in the coastwise trade of the Atlantic seaboard.[1]

For a few years following 1870 there was a keen competitive struggle between the railroads and the coastwise shipping. The carriers by water were aided slightly by the law enacted in 1870 abolishing federal tonnage duties on all vessels engaged in the coastwise trade. However, as was the case in most of the rate wars among competing railroads, the struggle for traffic was brought to a close by the formation of rate agreements among competing lines or by their consolidation. The process of consolidation of coastwise lines with railroads has been carried to such an extent that there are but few important coastwise steamship lines now in operation (1914) in which a controlling interest is not possessed by some railroad company or by a shipping consolidation which has close operating and financial connections with various large railway corporations.[2]

At no place was the failure of the coastwise trade to regain the position it had occupied before the Civil War more marked than at New Orleans. From this city the eastern railroads took virtually all of the trade which had been carried on between the Central and Eastern States by way of the Mississippi River and the Gulf of Mexico. Furthermore, the railroads penetrating the western cotton belt from the east and north made large incursions into the trade of New Orleans. St. Louis merchants sold provisions and supplies to planters living within 100 miles of New Orleans; on one side the cotton trade of the Gulf port was secured by growing railroad centers such as Memphis and Vicksburg, and on the other side similar inroads were made by the cities of the South Atlantic States. In 1858 almost one-half of the cotton crop of the country was marketed through New Orleans; in 1870 only 33 per cent. The receipts of meat at New Orleans in 1867–68 were only 709,000 pounds, as compared to 3,803,500 pounds in 1859–60, and there was a shrinkage in the receipts of all other western products.[3] As the South recovered from the effects of the war and railways were constructed radiating from New Orleans, the cotton traffic of the city again reached large proportions, and the coastwise trade in that commodity once more became large; but New Orleans has never regained the wide range of commercial activity possessed before the war.

At other ports on both the Gulf and the South Atlantic coast the competition of the railroad wrought similar changes. The merchandise trade was diverted from the coastwise lines, and though the cotton

---

[1] Harbor traffic not included.

[2] S. S. Huebner, *Report on Steamship Agreements and Affiliations in the American Domestic and Foreign Trade*: (House Report, Committee on the Merchant Marine and Fisheries, 63 Cong., 1914, IV, 403.)

[3] *Report on Internal Commerce, 1886*, p. 528.

:T AND THE

of gold in Cali-
53, 359. Coast-
3, 361. Traffic
al effect of the

of California in
ast between the
d States was of
and was for the
In the Oregon
rried on in con-
erican fur com-
ig the coast or
enth and early
of importance
s province had
United States,
ı, and fruit for
For the most
the trade with
vessels which

region along
sy with Great
1846, and by
›s during the
Government
tem of trans-
Pacific coasts.
in which the
nment of the

nama upon any
hereafter con-
ens of the United
, manufactures, or
ens of the United
d upon the citizens
a road or

Bay continued to center at the Maryland port. Norfolk (Virginia) and Wilmington (North Carolina) probably made a greater relative advance in maritime commerce, both domestic and foreign, than any other Southern cities. Savannah and Charleston, benefited by improved railroad communication with the interior and by the improvement of their harbors, each became the possessor of larger commerce than ever.

TABLE 39.—*Coastwise vessels required by law to report to customs officers, entered and cleared at ports on the Gulf Coast from and to ports north of Cape Sable.*

	Entered.				Cleared.			
	Steam.		Sailing.		Steam.		Sailing.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1900:								
New Orleans	228	502,355	21	15,772	228	502,659	14	8,259
Galveston	93	215,981	59	52,263	94	216,442	33	25,458
Mobile	22	31,366	9	3,635	18	27,757	31	16,255
1906:								
New Orleans	190	366,488	10	10,787	201	377,908	10	13,117
Galveston	503	1,219,650	122	244,617	489	1,089,076	126	250,497
Mobile	56	115,024	18	9,210	55	124,760	64	43,928
Total for customs districts of New Orleans, Galveston, Mobile, Apalachicola, Tampa, and Pensacola:								
1894	308	636,104	140	72,910	269	605,712	180	101,659
1900	359	772,012	136	100,055	358	768,950	201	137,874
1906	759	1,714,402	204	302,114	782	1,644,279	312	406,097

Little attempt was made by the Government—in fact under the laws which existed little attempt could be made—to secure statistics of the coastwise trade. In the annual volumes on *Commerce and Navigation of the United States* there were published from 1875 to 1880 statistics of the entrances and clearances of vessels engaged in coastwise commerce, but since only a small portion of the vessels were required by law to make any report of arrival or departure, the statistics presented "a very incomplete view of the entire movements of tonnage in the coastwise trade."[1] From 1898 to 1906 statistics of the movements of tonnage at Gulf ports to or from ports north of Cape Sable were published, it being possible to record a portion of such movements because the ports connected were, previous to 1906, in separate "great districts." Table 39, which shows the entrances and clearances for all ports and for each of the three most important ports for a few years, gives a partial indication of the growth of the coastwise trade.[2] The great

[1] *Commerce and Navigation of the United States, 1880*, p. 836.
[2] Compiled from *Commerce and Navigation of the United States, 1900*, p. 1111; *1906*, p. 1273.

increase between 1900 and 1906 was due in a large measure to the opening of the Texas oil-fields, the products of which were shipped coastwise from Port Arthur and other Texas points to eastern refineries.

In 1906 a law was enacted changing the "great districts." The seacoasts of the United States and Porto Rico were divided into five great districts—

"the first to include all the collection districts of the seaports and navigable rivers between the Northern boundary of the State of Maine and the Southern boundary of the State of Texas; the second to consist of the island of Porto Rico; the third to include the collection districts on the seacoasts and navigable rivers between the Southern boundary of the State of California and the Northern boundary of the State of Washington; the fourth to consist of the Territory of Alaska; the fifth to consist of the Territory of Hawaii."

By this law the three great districts existing since 1822 were consolidated into one, and it is no longer necessary for masters of vessels of more than 20 tons, which are bound between ports on the eastern coast of the country and which carry no commodities listed in the act of 1793, to make any report of arrival or departure. Statistical material such as that contained in the preceding table is consequently no longer available.

An act of Congress of February 21, 1891, requires owners and masters of vessels using a waterway which is being improved by the Federal Government to furnish the officers in charge of the work of improvement with a statement of the vessels and the passengers, freight, and tonnage. Under the provisions of this act the Army engineers have been able to collect a considerable fund of information concerning the coastwise traffic. The results of their work are published annually in the *Report of the Chief of Engineers*. Even these statistics, however, do not give a comprehensive picture of the coastwise trade. The purpose of collecting information is to show the amount of commerce carried by particular waterways. Duplications are unavoidable, accurate manifests can not be secured, often no distinction is made between foreign and domestic trade, and at many points along the coast no statistics are collected at all. Some of the statistics contained in these documents and in others will be shown in subsequent paragraphs.

GROWTH OF COASTWISE TRADE FROM 1900 TO 1912.

Since 1900 the coastwise trade of the Atlantic and Gulf coasts has grown considerably, though the expansion has been less than the increase of the traffic of the eastern railways. The tonnage of the vessels employed in the coasting trade, enrolled in the customs districts of the Atlantic and Gulf coasts in 1914, amounted to 2,958,000 tons, an increase of more than 850,000, or of 40 per cent of the tonnage of 1900. Of licensed vessels of less than 20 tons burden engaged in the coasting trade of the Atlantic seaboard in 1914 the number was 7,201, with a

total burden of 90,127 tons. In the following paragraphs some statistical material collected from a variety of sources is presented to show the general character of the coastwise trade of the leading seaports of the Atlantic and Gulf coasts. Where possible, information regarding the trade in different years has been given, in order that a view of the progress of the trade might be given. It must be remembered that in most instances the statistics are estimates, based partly on information collected by commercial and maritime exchanges, and partly on data collected by custom-house officials and Army engineers.

At New York, the chief center of the coastwise trade, the entrances from other Atlantic ports in 1902 and 1911 were as shown in table 40.[1]

TABLE 40.—*Coastwise entrances at New York, 1902 and 1911.*

	1902	1911
From Eastern ports.....	3,988	2,189
From Southern ports....	3,969	3,029
Total...........	7,957	5,218

Though, from the standpoint of volume, coal and lumber are the two most important articles entering the New York coastwise trade, shipments of merchandise to and from all other ports along the Atlantic seaboard, cargoes of cotton, sugar, tobacco, naval stores, and petroleum from the South, and of ice and stone from New England, make up a large part of the traffic entering and leaving the city. In 1902 the coastwise shipments of merchandise to and from New England ports amounted to 675,896 tons, and the receipts from New England amounted to 302,694 tons.[2] In 1911 the shipments were 1,113,923 tons and the receipts 907,054 tons.[3] Boston led all other New England cities in the trade with New York, though a valuable trade centered at such ports as Portland, New Haven, Fall River, Newport, Providence, and New London. The coastwise coal trade of New York gives employment to a larger tonnage of shipping than the trade in any other commodity. In 1902 more than 10,000,000 tons of coal, mostly anthracite, was shipped from the coal-docks of the city.[4] By 1911 the coal shipments reached over 25,000,000 tons, of which about 10,750,000 tons was bituminous.[5] About half of the coal carried coastwise from New York is taken to points in the immediate vicinity of the city, and the remainder is taken for the most part to New England cities, Boston and New Haven being the largest customers. Lumber is another important item in the coasting trade of New York. The receipts of southern

[1] *Monthly Summary of Commerce and Finance, Dec. 1902*, p. 1817; Dec. 1911, p. 982.
[2] *Ibid.*, Jan. 1903, p. 2075. [3] *Ibid.*, Dec. 1911, p. 981. [4] *Ibid.*, Jan. 1903, p. 2066.
[5] *Ibid.*, Dec. 1911, p. 980.

pine in 1902 amounted to 475,000,000 feet,[1] and in 1911 to 396,000,000 feet.[2] Nearly every port in the Carolinas, Georgia, and Florida shares in the New York trade in southern pine. From New England also considerable quantities of lumber, piling, laths, and material for boxes and crates are secured each year.

The arrivals of coastwise vessels at Boston in 1902 and 1911 are given in table 41.[3]

TABLE 41.—*Coastwise entrances at Boston, 1902 and 1911.*

	1902	1911
From Southern ports....	5,030	6,502
From Eastern ports.....	3,486	3,738
Total...........	8,516	10,240
Tonnage........	7,291,931	11,905,887

The outbound traffic of Boston consists mainly of merchandise and manufactured goods, while the inbound traffic is made up largely of coal, lumber, cotton, vegetables, petroleum, and general merchandise. The coal receipts in 1912 amounted to 6,338,802 tons, the largest portion coming from New York.[4]

At Philadelphia the coastwise arrivals in 1902 numbered 3,749 and in 1911, 4,955.[5] The total value of the domestic trade by water at Philadelphia in 1912, including a large amount of purely local trade, was $1,062,000,000.[6] The coal trade of Philadelphia amounts to about 7,000,000 tons annually, about one-third of the shipments being anthracite and two-thirds bituminous.[2]

At Baltimore the coastwise arrivals increased in number from 1,084 in 1902 to 1,402 in 1911, and the clearances from 1,107 to 1,744.[7] Bituminous coal constitutes an important item of the Baltimore coasting trade, the shipments in 1911 amounting to 4,002,809 tons.[2] Only a small quantity of anthracite is shipped from this port. From Newport News and Norfolk several million tons of bituminous coal are also shipped each year.

In 1912 the value of the coastwise traffic entering Charleston was $22,583,435 and the value of the outbound traffic $33,055,176.[8] The incoming freight at this city is made up chiefly of general merchandise and manufactures, and the outbound shipments consist largely of cotton goods, cotton, and lumber. The value of the coastwise trade of

[1] *Monthly Summary of Commerce and Finance, Dec. 1902*, p. 1816.
[2] *Ibid.*, Dec. 1911, p. 981. [3] *Ibid.*, Dec. 1902, p. 1817; Dec. 1911, p. 982.
[4] *Report of U. S. Chief of Engineers, 1913*, II, 1551.
[5] *Monthly Summary of Commerce and Finance, Dec. 1902*, p. 1818; Dec. 1911, p. 982.
[6] *Report of U. S. Chief of Engineers, 1913*, II, 1754.
[7] *Monthly Summary of Commerce and Finance, Dec. 1902*, p. 1817; Dec. 1911, p. 983.
[8] *Report of U. S. Chief of Engineers, 1913*, II, 2009.

Savannah in 1912 was $199,000,000, the receipts being valued at $113,416,394 and the shipments at $85,135,532.[1] The traffic is of the same general character as that of Charleston.

Galveston, by reason of the great trade in Texas cotton, now has the largest coastwise trade of any seaport on the Gulf. In 1912 the coastwise shipments from Galveston, consisting chiefly of cotton, ore, copper, rice, and lumber, had a value of $86,086,343, and the receipts, composed largely of manufactures, lumber, iron and steel products, and miscellaneous manufactures, were valued at $62,305,533.[2] New Orleans still possesses a large and valuable trade. The chief shipments from this city are cotton, sugar, molasses, and lumber, and the chief receipts are manufactured goods, oil, iron and steel products, and all kinds of manufactured goods. At Mobile the coastwise shipments of cotton and lumber and the receipts of merchandise and food products from ports on both the Atlantic and Gulf coasts make up a considerable part of the domestic commerce of the city.

On the whole, the coastwise commerce of the Atlantic and Gulf coasts of the United States is not so large as might be expected in view of the conditions of production and the cheapness of water transportation. The control of numerous water lines by railroad corporations has greatly limited competition among existing water and rail carriers, and has made it more difficult for independent water lines to enter the field. Destructive methods of competition have been employed by the railroads against the water lines.[3] Little attempt has been made in the past to regulate the operation of water lines, and the relations of coastwise carriers with each other and with the railroads. By the Panama Canal act of August 24, 1912, the Interstate Commerce Commission was given authority to regulate interstate transportation involving the carriage of property by rail and water to the extent of having power to compel the establishment of physical connection between rail and water carriers, to establish through routes and joint rates over rail and water lines, and to establish the proportional rail rate to the ports from or to which goods are transported by a carrier by water; and in 1913 a movement was started in Congress to enact a law giving the Interstate Commerce Commission a larger degree of authority, especially with reference to the regulation of the competitive practices to be employed by rail and water carriers. The outbreak of the European War in 1914 caused the consideration of the proposed legislation to be postponed.

---

[1] *Report of U. S. Chief of Engineers, 1913*, II, 2022. [2] *Ibid.*, 2242.

[3] For discussion of the control of competition among domestic water carriers see the Report of the Committee on the Merchant Marine and Fisheries on *Steamship Agreements and Affiliations in the American Domestic and Foreign Trade*, IV, pt. II. (House Report, 63 Cong., 1914.)

CHAPTER XXI.

THE COASTWISE TRADE OF THE PACIFIC COAST AND THE INTERCOASTAL TRADE.

Beginnings of the intercoastal trade, 358. Effect of the discovery of gold in California in 1848, 358. Entrances of vessels at San Francisco, 1850–1853, 359. Coastwise trade of the Pacific coast, 359. Intercoastal trade, 1869–1913, 361. Traffic via Cape Horn and via Isthmus of Tehuantepec, 362. General effect of the Panama Canal on the intercoastal traffic, 363.

Until after the United States acquired possession of California in 1848 the commerce of that portion of the Pacific coast between the present northern and southern boundaries of the United States was of small volume. The country contained but few people and was for the most part in an early stage of economic development. In the Oregon country the only commerce of importance was that carried on in connection with the operations of Russian, British, and American fur companies, which established posts at various points along the coast or navigable streams during the latter part of the eighteenth and early part of the nineteenth century. The only industries of importance in California were agriculture and stock-raising. This province had by 1848 built up a small trade with England and the United States, exchanging small quantities of wool, hides, tallow, grain, and fruit for manufactured goods and miscellaneous merchandise. For the most part, the commerce was carried on by vessels engaged in the trade with the Hawaiian Islands and the Orient, or by whaling vessels which visited the Pacific hunting-grounds.

The interest of the people of the United States in the region along the Pacific coast was greatly stimulated by the controversy with Great Britain over the Oregon territory, which was settled in 1846, and by the occupation of California by the United States troops during the Mexican War. An important question with which the Government had to deal was that of establishing a more effective system of transportation and communication between the Atlantic and Pacific coasts. In 1846 a treaty was negotiated with New Granada in which the Government of New Granada guaranteed to the Government of the United States—

"that the right of way or transit across the Isthmus of Panama upon any modes of communication that now exist, or that may be hereafter constructed, shall be open and free to the Government and citizens of the United States, and for the transportation of any articles of produce, manufactures, or merchandise, of lawful commerce, belonging to the citizens of the United States; that no tolls or charges shall be levied or collected upon the citizens of the United States, or their said merchandise thus passing over a road or canal that may be made by the Government of New Granada, or by the authority of the same, than is, under like circumstances, levied upon and collected from the Granadian citizens."[1]

[1] *Treaties of the United States*, Senate Ex. Doc. No. 36, 41 Cong., 3 sess., p. 186.

BEGINNINGS OF THE INTERCOASTAL TRADE.

On March 3, 1847, Congress enacted a law authorizing the Secretary of the Navy to enter into contracts for the carriage of the mail between New York and Oregon by way of the Isthmus of Panama, and in pursuance of this law a contract was negotiated in April for semi-monthly steamship service from New York to Charleston, New Orleans, Havana, and Chagres; and in November another contract was entered into for monthly service between Panama and Astoria.[1] The construction of the steamships for these lines was commenced at once and late in 1848 vessels of both the Atlantic and the Pacific fleet were ready for use. To facilitate still further the exchange of commodities between the two coasts of the country, Congress on May 27, 1848, passed an act permitting any registered vessel engaged in trade between domestic ports to stop and trade at one or more foreign ports during the course of its voyage. Under this law registered shipping could trade between Atlantic and Pacific ports of the United States, and touch at ports of the West Indies, Mexico, or South American countries.

Meanwhile, during the course of these preparations for more effective intercoastal communication, before the first vessel of the subsidized steamship lines was ready to sail and even before the ratification of the treaty of Guadalupe Hidalgo, by which Mexico ceded California to the United States, an event occurred which was completely to revolutionize the economic condition of the Pacific coast. This was the discovery of gold near Sutter's Fort, California, in January 1848. No sooner had the news of the discovery been definitely announced than thousands of people dropped their ordinary pursuits and prepared to hasten to the West. Some of the hurrying throngs went overland, and still more went by water, either around Cape Horn or via the Isthmus of Panama. In 1849 no less than 698 vessels cleared for California from various ports on the Atlantic coast, carrying passengers, provisions, tools, and all kinds of equipment for the mining camps.[2] Sailing-vessels were used in great numbers, and many large steamships were soon built to care for the expanding traffic. Two transisthmian routes of travel were soon opened, one by way of Panama and the other across Nicaragua. A railroad was started across Panama in 1850 and was completed in 1855. In 1850 the Clayton-Bulwer treaty was negotiated between England and the United States, providing for the protection of any canal which might be constructed across the Isthmus of Panama, and enumerating the rights and obligations of the two governments with respect to the canal. When the Gadsden treaty with Mexico was negotiated in 1853, a clause was included giving to the United States the right of transit across the Isthmus of Tehuantepec over a plank

[1] *Senate Doc.* No. 50, 32 Cong. 1 sess.
[2] *Hunt's Merchants' Magazine*, XXII, 1850, p. 208.

and rail road, the construction of which the Mexican Government had just authorized.[1]

Table 42 shows the arrivals of vessels at San Francisco during the years immediately following the gold rush and gives an idea of the great volume of trade which sprang into existence.[2]

TABLE 42.—*Entrances at San Francisco, 1850–1853.*

Year ending June 30—	U. S. vessels.		Foreign vessels.	
	No.	Tonnage.	No.	Tonnage.
1850......	140	47,950	355	82,914
1851......	379	115,779	482	142,349
1852......	342	145,893	376	115,459
1853......	216	120,211	444	137,817

For the most part, the American vessels came from ports of Central or South America, with passengers and cargoes from the Atlantic coast of the United States, and the arrivals indicate consequently the state of the intercoastal trade. San Francisco advanced in a few months from a position of relative insignificance as a port to a position of high importance, standing next to New York by 1850 with respect to the number of vessels entered and cleared. In 1849 there were 12 steamers making regular trips between San Francisco and Panama, a larger number than were employed between New York and Liverpool and New York and Havre combined.[3] The freight brought in from the Eastern States and from abroad included a wide variety of articles—clothing, provisions, tools, machinery, furniture, explosives, tents, drugs, hardware, and general supplies of many kinds.

While gold was the most important product of California and the chief export from the standpoint of value, the other resources of the State were by no means neglected. Disappointed gold-seekers were quick to turn to other opportunities presented for acquiring wealth, and a stream of products from ranches and farms—wool, hides, skins, wheat, and barley—helped swell the volume of trade. By 1860 California was sending almost 3,000,000 pounds of wool each year to New York.[4] The growth of population in California from 92,597 in 1850 to 379,994 in 1860 was an index of the rapid economic development of the State.

COASTWISE TRADE OF THE PACIFIC COAST.

The sudden expansion of population in California gave animation to industry along the entire Pacific coast. South of San Francisco the small ports—San Diego, San Pedro, Santa Barbara, and Monterey—

[1] *Treaties of the United States*, Ex. Doc. No. 36, 41 Cong., 3 sess., p. 575.
[2] Compiled from *Commerce and Navigation of United States*, 1850–1853.
[3] *Hunt's Merchants' Magazine*, XXIV, 1851, p. 549. [4] *Ibid.*, XLV, 1861, p. 6.

acquired a thriving business, most of their trade consisting of the exchange of grain and provisions for the supplies brought from the Atlantic States to San Francisco. Northward the development of the forest districts around Humboldt Bay and in Oregon and Washington met the demand for lumber for ship-building and for the construction operations of the rising western cities. Oregon in particular had a steady growth, the population rising from 13,294 in 1850[1] to 52,465 in 1860. The number and acreage of farms in Oregon quickly advanced and each year large quantities of flour, bacon, fruit, and cattle were sent to San Francisco. Gold was discovered in Washington in 1857, along the Fraser River, and there was a rush to that section similar to that made to San Francisco a few years before. Deposits of coal were found in Washington near Puget Sound, and this valuable mineral, together with lumber, made possible the development of a thriving coastwise trade with San Francisco. The total coastwise trade of the Pacific coast, including the commerce of the rivers, was sufficient in 1860 to give employment to a fleet of enrolled and licensed vessels of a total tonnage of 37,000 tons.[2]

After 1860 there was a steady advance in the economic development of the Pacific region. California's population rose from 864,694 in 1880 to 2,377,549 in 1910. The gold mines of California soon reached the maximum of their output, and though they continued to be a source of wealth, they were of small importance as compared to the ranches, farms, vineyards, and forests of the State. In Oregon lumbering and agriculture remained the most important industries and the same was true of Washington. Following 1883, when the Northern Pacific Railroad was completed, both Washington and Oregon developed with great rapidity. The population of the former State increased from 75,116 in 1880 to 1,141,990 in 1910, and the population of the latter advanced from 174,768 to 672,765 during the same period. Washington became the leading lumber-producing State of the country, and also took high rank in the production of wheat.

The coastwise trade carried on among the three Pacific States constantly increased in volume. As was the case on the Atlantic coast, the water traffic came to consist chiefly of heavy bulky commodities, lumber being by far the most important single item.

The steamship lines put in operation along the coast, however, of which there were 8 important ones by 1913, made possible the development of a large water-borne merchandise freight and passenger service. The increase in the tonnage of vessels enrolled and licensed at the customs districts of the Pacific coast from 110,000 tons in 1870 to 307,000 tons in 1900 and to 637,000 tons in 1914 was a good index of the growth of the coastwise trade among the three Pacific States.[3]

---

[1]Including Washington in 1850.
[2]*Commerce and Navigation of the United States, 1860*, p. 659.
[3]*Ibid.*, 1870, p. 752; *Report of U. S. Commissioner of Navigation. 1900*, p 363; 1914, p. 156.

San Francisco maintained its position as the leading trade center on the Pacific coast for both foreign and domestic trade. The tonnage of vessels arriving at this port coastwise in 1911 was over 4,200,000 tons, and the tonnage of departing vessels 4,640,000 tons.[1] The receipts of lumber, the most important item in the coastwise trade, amounted in 1911 to nearly 1,000,000,000 feet.[2] Pine and fir from Washington and Oregon and redwood from the Humboldt Bay district made up most of the lumber trade. In addition to lumber, the inbound coastwise traffic at San Francisco included large quantities of flour, wheat, barley, and oats from other ports along the coast, and several hundred thousand tons of coal each year from Seattle, Tacoma, and other Washington ports. The outbound traffic from San Francisco was made up mainly of lumber, oil, manufactured goods, and general merchandise.

The chief ports to be developed on Puget Sound were Seattle and Tacoma. The value of the coastwise shipments from Seattle in 1911 was given by the harbor-master as $39,286,000, and the value of the receipts as $29,080,000.[3] The outbound coastwise traffic is made up chiefly of lumber, grain, and coal, and receipts consist of oil, cement, iron and its manufactures, sugar, salt, and all kinds of general merchandise.[3] At Portland, the chief shipping center of Oregon, a trade similar to that of the Puget Sound ports was built up, with the exception that there were no shipments of coal. The manufacture of flour became an important industry in Portland, and each year thousands of barrels of flour entered the shipments to domestic and foreign markets.

The city of Los Angeles by 1914 was a close rival of San Francisco as a commercial and industiial center. At the Port of Los Angeles, formerly named San Pedro, a good harbor was constructed and a coastwise trade similar to that of San Francisco was built up, the inbound traffic consisting largely of lumber and provisions and the outbound traffic being made up of oil, manufactured articles, and general merchandise.

INTERCOASTAL TRADE, 1869 TO 1913.

The commerce by water routes between the States on the Atlantic and Pacific coast was greatly reduced by the competition of the transcontinental railroads, the first of which, the Union Pacific, was completed in 1869; and though a portion of the intercoastal trade continued to be carried on around Cape Horn or by way of the Isthmus of Panama after the railroads were constructed to the coast, by far the largest part of the trade soon abandoned the water routes. In 1870 the shipments from New York to San Francisco via the Isthmus of Panama were valued at $15,300,000, and the return shipments over the same route were valued at $3,150,000.[4] By 1880 the value of the two streams of

[1] *Monthly Summary of Commerce and Finance, Dec. 1911*, p. 989. [2] *Ibid.*, 990.
[3] *Ibid.*, 991. [4] *Commerce and Navigation of the United States, 1870*, p. 672.

traffic had fallen to $2,600,000 and $2,850,000 respectively. The traffic in both directions increased somewhat after 1890, though it never attained the value reached before the beginning of railway competition. In 1910 the west-bound traffic by way of Panama had a value of $4,244,000 and the east-bound traffic a value of $3,590,000,[1] and in 1913 the value of the two movements were respectively $11,323,000 and $6,875,000.[2] Wool and wine held a leading position in the traffic from the Pacific coast, while the return shipments were made up largely of miscellaneous manufactured wares. It was estimated that in 1909, of the west-bound traffic between the Atlantic and Pacific coasts, 89.5 per cent moved by rail and only 10.5 per cent, by water,[3] and of the east-bound traffic in 1911 the railroads carried 95 per cent and the water carriers 5 per cent.[4] The preponderant position of the railroads in the intercoastal traffic was maintained not altogether on account of their natural advantages. From 1874 until 1907 the transcontinental railroad companies either controlled the steamship lines operating between the two coasts by way of the Isthmus of Panama, or by a consistent policy of competition kept the traffic of the water carriers down to a relatively small volume.

The intercoastal trade around Cape Horn likewise had but little growth from 1890 to 1913, as is shown by table 43, which shows the movement of vessels between the two coasts by this route.[5]

TABLE 43.—*Movement of vessels between Atlantic and Pacific ports of the United States via Cape Horn, selected years 1891 to 1913.*

	1891		1896		1900		1910		1913	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Atlantic ports:										
Cleared from....	62	108,206	15	28,946	21	39,487	11	30,143	16	35,437
Entered at......	16	26,275	8	13,667	4	8,216	14	30,307	4	9,506
Pacific ports:										
Cleared from....	14	23,812	25	53,143	7	12,642	11	25,201	1	2,052
Entered at......	59	98,996	37	71,090	18	36,428	28	87,004	23	67,147

In 1907 a third route for intercoastal trade was opened, when the American-Hawaiian Steamship Company, which had formerly run its vessels by way of the Straits of Magellan, began to ship its traffic from ocean to ocean over the railway across the Isthmus of Tehuantepec. The traffic by this route soon attained a considerable volume, the west-bound shipments increasing in value from $5,500,000 in 1907 to $62,400,000 in 1913, and the east-bound shipments increasing from

[1] *Commerce and Navigation of the United States, 1910*, p. 1438.
[2] *Monthly Summary of Commerce and Finance, June 1913*, pp. 1376, 1377.
[3] Johnson, *Panama Canal Traffic and Tolls*, 54.
[4] *Ibid.*, 58. [5] *Commerce and Navigation of the United States, 1900*, p. 1111; 1913, p. 876.

$5,880,000 to $32,000,000 during the same period.[1] The west-bound traffic consisted chiefly of manufactured goods, while the most important item of the east-bound shipments was Hawaiian sugar destined for the refineries of Philadelphia and New York.

An event of great importance in the intercoastal trade was the opening of the Panama Canal in 1914, the construction of which was begun by the United States Government in 1904. This great waterway, built at a cost of $375,000,000, was constructed primarily to assist the intercoastal trade and to add to the efficiency of the United States navy. The costs of transportation had for a long time restricted the volume of trade between the eastern and western sections of the country, but the canal has made possible the greatest freedom of interchange of commodities produced in both sections. Even before the opening of the canal preparations were made to take advantage of the commercial opportunities which the canal offered. New ships were built, new docks were constructed, and new markets were sought.

The effect of the canal upon the intercoastal coastwise trade was immediately apparent. Six steamship lines with 49 vessels began operating coastwise through the canal, and vessels owned or chartered by shippers were used to a large extent in transporting bulk cargoes of lumber, oil, and coal. During the first year of the canal's operation, the intercoastal shipments via the canal averaged 175,000 tons of cargo monthly. This was a much larger traffic than had been predicted for the first year, and it indicated clearly that with the opening of the Panama Canal the intercoastal trade had entered upon a new era.

[1]*Commerce and Navigation of the United States 1907*, p. 1308; *Monthly Summary of Commerce and Finance, June 1913*, p. 1376. Traffic includes shipments to and from Hawaii.

History of Domestic and Foreign Commerce of the United States

BY

Emory R. Johnson,
T. W. Van Metre, G. G. Huebner, and D. S. Hanchett

With Introductory Notes by
Henry W. Farnam

Volume II

CONTENTS.

Part I.—The Foreign Trade of the United States Since 1789.

By G. G. Huebner.

Chapter XXII.

Page

Survey of American Foreign Commerce at the Beginning of the National Period. By Emory R. Johnson 3

American industries in 1790, 3. Foreign and domestic trade in 1790, 6. The status of the fisheries, 9. Conditions affecting American shipping, 10. Disadvantages of American shipping in competition with British shipping, 11. Commercial outlook in 1790, 12.

Chapter XXIII.

The First Quarter Century, 1790 to 1815 14

Activity in the foreign trade from 1790 to 1807, 14. Reasons for growth of export trade, 15. General growth of exports and imports, 20. Growth of Oriental trade and extension of trade into distant countries, 25. Growth of the carrying trade, 27. Decline of foreign trade and shipping, 1807–1815, 29.

Chapter XXIV.

The Foreign Trade from the Treaty of Ghent to the Civil War 31

The abnormal advance from 1815 to 1818, 31. Causes for the enlarged exports, 33. Reasons for the increase in imports, 35. Twelve years of trade recession, 1819–1830, 37. Causes of the stagnation in the export trade, 1819–1830, 38. Six years of improvement, 1831–1836, 41. Localities affected by growth in foreign trade, 43. A decade of irregular foreign trade, 1837–1846, 44. Fourteen years of buoyant foreign trade, 1847–1860, 46. Value of imports and exports, 1846–1860, 48. Destination of exports, 50. Revival of the foreign carrying trade, 51. Summary and conclusion, 51.

Chapter XXV.

Changes Effected by the Civil War 54

Effects of the war upon export trade, 54. Trade of the blockade-runners, 57. Foreign trade in cotton, 58. The war and the import trade, 58. After-effects of the Civil War upon industry, 59; commerce of the South, 60; shipping, 61, and import duties, 62. The Civil War an epochal period in the history of the foreign commerce, 63.

Chapter XXVI.

The Foreign Trade from the Civil War to the Close of the Nineteenth Century 64

Increase in import and export trade, 64. Price fluctuations, 1870–1900, 65. Changing relations between imports and exports, 66. The leading exports of the United States, 66. Growth in value of each, 1865–1900, 67. Domestic exports classified according to uses, 70. The growth of foreign markets, 72. Value by groups of the leading imports of the United States, 77. Sources of the imports into the United States, 78. Widened basis of American foreign trade, 81. The carrying trade, 84.

CHAPTER XXVII. PAGE

The Foreign Trade in the Early Years of the Twentieth Century, 1900–1913 86

Extraordinary growth in foreign trade, 86. The balance of trade in favor of United States, 87. Changes in nature of exports, 87. Increase in exports of manufactures, 88. Exports of raw materials, 89. The shift from exports of agricultural to exports of manufactured commodities, 89. Changes in the foreign markets for exports, 90. Higher tariffs imposed by foreign countries, 91. Progress made in exports to non-European countries, 91. Changes in the nature and source of imports, 92. Restriction on imports of finished manufactures, 92. Relative progress made by the ports in the export and import traffic, 94. Development of foreign markets for American manufactures, 95. Obstacles encountered and progress made in the competition with foreign manufacturers, 96.

CHAPTER XXVIII.

The Trade with Non-Contiguous Possessions 98

Commercial importance of outlying possessions of the United States, 98. The trade with Alaska, 99. The trade with the Hawaiian Islands, 101. The sugar industry of Hawaii, 103. The trade with Porto Rico, 104. Trade of the Philippine Islands under Spanish dominion, 107. The trade of the Philippines since American acquisition, 109. Advance in Philippine trade with the United States, 111. Commercial value of non-contiguous possessions summarized, 112. Statistics of trade between the United States and its non-contiguous territories, 1899, 1900, 1905, 1910, 1913, 114.

CHAPTER XXIX.

The Organization of the Foreign Trade 116

Trading companies prior to 1664, 117. The merchant carrier, 117. The common carrier on the ocean, 118. Charter and line services, 119. Steamship lines: organization, consolidations, conferences, 121. International express service, 124. International mail services and payments, 126. Cable and wireless telegraphy, 127. International trade organization, 128. Financing international trade, 130. Marine insurance, 132. Export trade developed by "trusts," 134.

CHAPTER XXX.

Commercial Treaties of the United States 135

General commercial and navigation treaties, 135. Most-favored-nation clause, 137. The treatment of shipping, 138. Special commercial treaties and agreements, 140. Treaties concerning river and lake navigation, 141. Treaties regarding interoceanic canals, 141. Concerning Canadian canals, 143. Special trade reciprocity treaties, 144. Commercial treaties with China, 145. Commercial treaties with Japan, 149. International conventions, agreements, unions, and other acts, 152.

PART II.—THE FISHERIES.

BY T. W. VAN METRE.

CHAPTER XXXI.

The Fisheries of New England, 1789–1860 157

Prosperous condition of fisheries, 1789–1860, 157. The whale fishery, 158. Whaling expeditions to the Pacific Ocean, 159. Whale products in the foreign trade, 159. The whaling industry at Sag Harbor, Nantucket, and New Bedford, 160. Decline of the whaling industry, 161. The cod fishery, 161. Bounties in aid of the cod fishery, 162. Provisions of act of 1819, 161. Increase in tonnage of cod fishing fleet, 163. Fishing rights opposed by the British Government in 1815, 164. The beginning of the "fishery question" in 1818, 165. Exports of cod, 1830 to 1860, 165. The mackerel fishery, 166. Herring, halibut, menhaden, oyster, and lobster fisheries, 167.

CHAPTER XXXII.

PAGE

Fisheries of New England Since 1860 169

The development and conservation of the fisheries of the United States since 1860, 169. The change in the relative importance of fish products, 170. The whale fishery, 1860 to 1910, 171. Destruction of whaling vessels during Civil War, and subsequent decline of the whaling industry, 171. Cod and mackerel fisheries, 1860–1910, 173. Tonnage of vessels in the cod and mackerel fisheries, 1870–1910, 174. The herring, shad, squeteague, and menhaden fisheries, 175. The shellfish fisheries, 177.

CHAPTER XXXIII.

The Fisheries of the Atlantic and Gulf Coasts 179

Fish resources of the Atlantic and Gulf coasts, 180. Extent and value of the fisheries, 182. Statistics for 1908, 183–184. Statistics of Gulf fisheries in 1908, 185. The shellfish fisheries, 185. Quantity and value of oyster fishery in 1908, 186. Early methods of marketing oysters, 187. Shucking and canning of oysters, 189. Prosperity of the oyster business after 1850, 189. Oyster planting and culture, 190. The oyster industry in the South Atlantic and Gulf States, 192. The clam and crab fisheries, 192. The shad fishery, 193. Establishment of shad hatcheries after 1880, 194. Quantity and value of shad fisheries in 1908, 195. Shad fishery of the Chesapeake Bay and Delaware River, 195. Other fisheries, 196. The rise and decline of the sturgeon fishery, 196. The menhaden oil and fertilizer industry, 199. The sponge fishery, 201.

CHAPTER XXXIV.

The Fisheries of the Great Lakes and the Mississippi River System ... 202

Growth of the Great Lakes fisheries, 1880 to 1908, 202. Statistics of the fisheries of the Great Lakes in 1908, 203. Varieties of lake fish, 203. Location of the early Great Lakes fisheries, 204. Fisheries of the Great Lakes after 1870, 205. The culture of fish for the Great Lakes, 206. Fisheries of the Mississippi River and its tributaries, 207. The mussel fishery and the manufacture of pearl buttons, 209. Other river fisheries, 210.

CHAPTER XXXV.

The Fisheries of the Pacific Coast 211

Rapid development of Pacific coast fisheries, 211. Location of the most important fishing grounds, 211. Salmon fisheries, 212. Beginning of salmon canning, 213. Canning of salmon in Alaska, 214. Regulative measures established by State and Federal governments for preservation of salmon, 215. The seal fisheries, 216. The early fur-seal fishery of the Pribilof Islands, 216. Reckless killing of seals, 217. Leases of seal fishery to Alaska Commercial Company and to the North American Commercial Company, 218. Pelagic sealing and its destructive effect, 218. Increase of fur-seal herd since 1912, 219. Whale fisheries, 220. Other fisheries, 220. Introduction of Atlantic coast fish to the waters of the Pacific, 222.

CHAPTER XXXVI.

The Fisheries as an International Question 223

Treaties of 1783 and 1818, 223. Controversy over treaty of 1818, 224. Seizures under the "headlands theory," 225. The Reciprocity Treaty of 1854, 226. Attempts of Canada to restrict operations of American fishermen, 1868–1870, 227. The Treaty of Washington, 1871, 227. The Chamberlain-Bayard Convention and *modus vivendi* of 1888, 229. The Blaine-Bond Convention of 1890 and the Bond-Hay Convention of 1902, 230. Agreement to arbitrate North Atlantic fisheries dispute, 1909, questions submitted, 231. Decision of the arbitration tribunal, 232. Controversy over the fur-seal fisheries, 235. Questions submitted to arbitration in 1893, 236. Award of the arbitrators in the fur-seal controversy, 237. Agreement of United States, Great Britain, Russia, and Japan regarding fur-seal fisheries, 1911, 238.

PART III.—GOVERNMENT AID AND COMMERCIAL POLICY.

BY D. S. HANCHETT.

CHAPTER XXXVII. PAGE

The Machinery of Federal Regulation of Commerce.................. 241

Regulation of commerce before 1789, 241. The commerce clause of the Constitution, 242. Powers of the President regarding commerce, 243. Commercial functions of Department of State, 244. The Department of War, 245. Department of the Treasury, 246. The customs service, 246. Revenue Cutter Service, 248. Life-saving Service, 249. Marine Hospital, 249. Bureau of Public Health, 250. Quarantine Service, 250. The Post Office Department, 251. Department of Justice, 251. Department of the Navy, 252. Hydrographic Office, 252. Department of the Interior, 253. The Department of Agriculture and the Weather Bureau, 254. Department of Commerce: the Lighthouse Service, 255; the Bureau of the Census, 256; the Coast and Geodetic Survey, 257; the Bureau of Foreign and Domestic Commerce, 258; the Bureau of Standards, 260; Steamboat-Inspection Service, 261; the Bureau of Navigation, 262; the Bureau of Corporations, 263. Department of Labor, 263. Independent governmental and international agencies, 264. The judiciary and legislative agencies, 265.

CHAPTER XXXVIII.

The Consular Service of the United States: Its History, Commercial Functions, and Influence upon American Commerce..... 267

Duties performed by consuls, 1776 to 1789, 267. The pre-constitutional consular service, 268. Treaty of amity and commerce with France, 1778, 268; with The Netherlands (1782), Sweden (1783), and Prussia (1785), 269. Powers of consuls defined in treaty with France, 1788, 270. An inadequate consular service, 1789–1856, 271. Acts of 1790 and 1792, 271. Consuls required to certify invoices of imports, 1818, 273. Legislation regarding consuls prior to 1856, 273. Consular reform, acts of 1855 and 1856, 274. A service unresponsive to commercial needs, 1856–1906, 276. Questions of salary, of fees, and of trading, 278. Growth in number of consuls, 1856 to 1906, 279. Efforts to reform the service, executive orders, 279. Slight result accomplished, 280. Reorganization of the service; the Lodge Act, 1906, 281. Provisions and effect of Root-Roosevelt executive order of June 27, 1906, 282. Extension of the merit system by President Taft and Secretary Knox, 283. Act of May 11, 1908, 284. Organization and supervision of the service in 1913, 285. Extraterritorial and other functions of consuls, 288. Activities of consular service in promoting trade, 290. Publications containing consular reports, 290. Services in preventing frauds against customs, 293. Personal service of consuls to facilitate trade, 293.

CHAPTER XXXIX.

Policy of the United States Towards Shipping and Ship-Building...... 295

Discriminating duties and shipping reciprocity, 295. Provisions of the acts of July 4 and 20, 1789, 296. Provisions of the reciprocity act of 1815, 297; act of 1817, 297; act of 1828, 297. Reciprocity treaties, 298. Discriminating tonnage taxes and customs duties, 299. The reciprocity clause in the act of 1884, 299. Tariff concessions and registry laws, 300. Aid to vessels in the coastwise trade and fisheries, 303. Legislation concerning seamen, 305. Ship subsidies, 1845–1872, 308. Partial revival of ship subsidies, 1865, 310. The ocean mail payment law of 1891, 311. The Navy and American shipping and ship-building, 313. The first iron warship, the *Michigan*, 315. The effects of the Civil War, 315. Decadence of the navy and ship-building after the Civil War, 316. Stimulating effect of Spanish-American War, 316. Summary of American shipping policy, 317.

CHAPTER XL.

PAGE

Improvement of Rivers and Harbors and Regulation of Waterways.... 319

The first period of river and harbor improvement, 1789–1823, 319. Gallatin's plan, 1808, 320. River and harbor legislation from 1823 to the Civil War, 321. Objections of President Jackson to Federal aid for internal improvements, 1830, 321. Causes of opposition to Federal aid and to internal improvements from 1830 to 1860, 322. From the Civil War to 1900, 323. Controversies over river and harbor legislation, 324. Waterway policy from 1900 to 1912, 325. The National Rivers and Harbors Congress, 326. Investigations and reports by the Inland Waterways Commission and the National Waterways Commission, 1907–1912, 326. Betterment of methods and agencies of making improvements, 328. Adoption by Congress of the "continuing contract" system, 1890, 329. Measures for prevention of floods, 330. Development of water-power by Federal Government, 331. Federal regulation of waterways, 331. Power over carriers by water vested in the Interstate Commerce Commission by the act of 1887, 332. Provisions of the Panama Canal act of 1912 regarding carriers by water, 333.

CHAPTER XLI.

Tariff Provisions Concerning the Shipping and Foreign Trade of the United States. By G. G. Huebner.................... 335

Three general periods of tariff provisions regarding shipping and foreign trade, 335. Early tariff provisions to aid Oriental trade, 336. Tariff provisions affording protection to shipping, 337. Tariff provisions regarding shipping reciprocity, 338. List of treaties establishing shipping reciprocity, 339. Trade reciprocity treaties with Canada, 340; with Hawaii, 341. Reciprocity agreements of the McKinley and Dingley Acts, 342. Reciprocity treaty with Cuba, 344. List of reciprocity treaties and agreements, 345. Miscellaneous tariff provisions to promote trade, 346. The dual tariff policy of the Payne-Aldrich Act of 1909, 347. Summary, 347. Tabular digest of provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping and ship-building, 349.

Bibliography... 352

References on bibliography, 352. Colonial trade and trade to 1789, 353. Domestic commerce, 354. The foreign trade, 1789–1914, 356. Trade with non-contiguous possessions, 359. Fisheries, 360. Government aid and commercial policy, 361. General references, 364; on colonial trade and trade to 1789, 370; on domestic commerce, 374; on the foreign trade, 1789–1914, 377; on trade with non-contiguous possessions, 382; on fisheries, 384; on Government aid and commercial policy, 385.

Index... 387

MAPS.

Facing page

6. Trade Routes and Distances by the Panama Canal and Other Routes.. 120
7. Fishing Grounds of the Gulf of Maine........................ 158
8. Fishing Grounds of Newfoundland, Cape Breton Island, Gulf of St. Lawrence, and Nova Scotia............................ 168
9. Chief Fishing Grounds of the Pacific Coast.................. 212
10. Fishing Privileges of the United States under the Treaty of 1818.. 224

PART ONE

THE FOREIGN TRADE OF THE UNITED STATES SINCE 1789

BY G. G. HUEBNER

CHAPTER XXII.

SURVEY OF AMERICAN FOREIGN COMMERCE AT THE BEGINNING OF THE NATIONAL PERIOD.[1]

American industries in 1790, 3. Foreign and domestic trade in 1790, 6. The status of the fisheries, 9. Conditions affecting American shipping, 10. Disadvantages of American shipping in competition with British shipping, 11. Commercial outlook in 1790, 12.

Before considering in detail the history of the foreign commerce of the United States during the period of national life under the Constitution, it will be helpful to survey the status of the industries and trade of the United States in 1789 and 1790. This will afford a fixed point from which to measure the progress antecedent and subsequent to the adoption of the Constitution.

The year 1789 was significant in the economic as well as the political history of the United States. The country was recovering from the business depression that had begun in 1785. The revival of industry from the setback of that year had been slow, but the country was in reality economically sound. Abundant available resources awaited development; and what was needed to enable business to expand was an effective government with power to provide itself with revenue, to establish public credit, to create a sound national currency, and to regulate interstate and foreign trade. The government under the Constitution, steadied by the judgment of Washington and guided by the financial and political genius of Hamilton, established conditions required for the internal development of the country.

The working out of international relations favorable to the foreign trade of the United States proved to be a more difficult task. Indeed, it was long after the second war with Great Britain that the United States first secured satisfactory commercial treaties with several important powers. The handicap which this placed upon the foreign trade of the United States was, as will be pointed out later, more than overcome, from 1793 to 1805, by the continental European wars that gave American merchants exceptional opportunities as neutral traders. The Constitution and the measures adopted early in Washington's administration enabled internal industry and trade to continue the growth that had started before 1789; but foreign commerce was given its first strong impulse by the continental wars.

The growth in population, by natural increase and by immigration, was rapid. The first census of the United States, taken in 1790, showed that there were 3,921,326 people in the country, of whom about five-sixths were white and one-sixth black. There had been an increase

[1]This chapter was written by Emory R. Johnson.

of approximately 1,000,000 during the decade following the surrender of Yorktown. While the population was still mainly between the Atlantic and the Alleghenies, commonwealths were rapidly forming in Tennessee, Kentucky, and Ohio.

AMERICAN INDUSTRIES IN 1790.

A concise, though general description, of the industrial characteristics of the United States is contained in a *Report of a Committee of the Lords of the Privy Council on the Trade of Great Britain with the United States.* This official British document, dated January 1791, pictures conditions in the United States, in 1790, as they appeared to Englishmen, whose impulse would be to understate rather than to exaggerate, and thus their account has the merit of being conservative as well as contemporary. The report (pp. 29–31) states that:

"In that part of the United States situated to the south of Pennsylvania, there are no manufactures whatsoever except a few articles made of leather which they are enabled to manufacture from the low price of skins purchased by them. The Legislatures of the Northern and Middle States have passed laws and established Societies for the encouragement of Manufactures. The inhabitants of these States manufacture some coarse articles for their own use, but few for exportation. In the Southern and Middle States there is some wool, but of an inferior quality and much dearer than in Great Britain. In the States of New England, linen of a coarse sort has been made, and some of it has been exported for the use of other States. In New England and Pennsylvania there are many Iron works, some of them were established before the war, and nails and inferior sorts of iron tools have been manufactured, so as to diminish very much the importation from Europe.

"In New England and New York many sorts of household furniture are made and every kind of carriage in tolerable perfection, as well as some other articles, the materials of which are principally wood and iron. In New England & Pennsylvania attempts have been made to introduce cotton manufactures, but it appears from the specimens transmitted to the Committee that these manufactures are in general of the common sort, and much inferior in quality and dearer than those of Manchester. In Pennsylvania, paper mills have been erected, in which paper is made of a tolerable quality, sufficient for their own consumption, and some even for exportation: and in this State, Sugar refineries have also been established (some even before the war) with success, and they are now endeavoring to draw sugars from a particular kind of maple which they have in great abundance, and thereby to diminish the quantity of sugar imported from the West Indies. They brew porter in Pennsylvania, but of a very inferior quality.

"The inhabitants of all temperate climates will occasionally employ themselves in manufactures for domestic use, during such seasons of the year as their lands do not require their attendance. But these domestic occupations seldom rise to manufactures of any great extent. The people of the United States find much greater profit from the cultivation of the earth, and it is astonishing how much they prefer agriculture to manufacture."

For the most part, the industrial activities of the American people, in 1790, were the same as they had been throughout the eighteenth

century. Most people were engaged in agriculture. In New England, the fisheries were second only to agriculture. Throughout all the colonies many people devoted all or a part of their time to lumbering or securing other forest products. Ship-building and flour-milling were relatively important industries in the northern colonies; but most other manufacturing activities were carried on as domestic or small-shop and small-mill industries.[1] Factory processes were applied to some extent in the manufacture of iron and steel wares, woolen textiles, and shoes. There had been some diversification of manufactures during the Revolutionary War, but the restoration of peace soon checked the growth of the infant industries and no permanent industrial revolution resulted from the war. In general, the people of the United States, in 1790, were farmers and planters, fishermen, and traders. Manufacturing outside of the home or small shop and mill was relatively unimportant, although evidences of a change were at hand.

The best first-hand account of American industries at the beginning of the national period is to be found in *A View of the United States of America in a Series of Papers, Written at Various Times, Between the Years 1787 and 1794*, by Tench Coxe, who held in succession the offices of Assistant Secretary of the Treasury and Commissioner of the Revenue during Washington's first administration. His estimate of the relative rank of the agricultural, commercial, and manufacturing industries in America in 1787 was as follows:

"The commerce of America, including our exports, imports, shipping, manufactures and fisheries, may be properly considered as forming one interest. So uninformed and mistaken have many of us been, that it has been stated as our greatest object, and it is feared that it is yet believed by some to be the most important industry of New England. But calculations carefully made do not raise the proportion of property, or the number of men employed in manufactures, fisheries, navigation, and trade[2] to one-eighth of the property and people occupied by agriculture even in that commercial quarter of the Union. In making this estimate, something has been deducted from the value and population of the large towns for the idle and dissipated, for those who live upon their incomes, and for supernumerary domestic servants. But the disproportion is much greater, taking the Union at large, for several of the States have little commerce, and no manufactures—others have no commerce and scarcely manufacture anything. The timber, iron, cordage, and many other articles necessary for building ships to fish or trade—nine parts in ten of their cargoes—the subsistence of the manufacturers, and much of their raw materials are the produce of our lands. In almost all the countries of Europe, judicious writers have considered commerce as the handmaid of agriculture;

[1]Tench Coxe stated in 1791 that there were "upwards of fifty paper mills" in Pennsylvania. The annual value of the output of these mills was $250,000, and the persons employed in them did not exceed 150 or 200. This is an indication of the small scale on which manufacturing was conducted.

[2]This is explained by the author to include only those whose regular occupations are other than agricultural. Persons who engaged in manufacturing to some extent were "little more than half of the people of New England."

if true there, with us it must be unquestionable. The United States have yet few factories to throw into the scale against the landed interests. We have in our lands full employment for our present inhabitants, and instead of sending colonies to newly discovered islands, we have adjoining townships and counties whose vacant fields await the future increase of our people."[1]

Manufactures, though relatively unimportant as compared with agriculture, and though carried on within the homes or in small establishments, were, as Coxe states, "great, various, and universal." It was the day of small things in industry; but, when every other man was an artisan skilled in some kind of work, the product was socially, as well as financially, of high value.

FOREIGN AND DOMESTIC TRADE IN 1790.

The total foreign trade of the United States in 1790 amounted to about $39,000,000, the value of the exports being somewhat less than that of the imports. (See table 44, page 20.) Tench Coxe, writing in 1793, said:

"The imports of the United States consist in a small degree of necessaries, in a great degree of articles of comfortable accommodation, and in some degree of luxuries; but the exports consist chiefly of prime necessaries, with some articles of mere comfort and utility, and some of luxury."[2]

Over three-fourths of the value of the exports was contributed by breadstuffs, tobacco, rice, and lumber—breadstuffs comprising about 40 per cent of the total and tobacco over 20 per cent. Other important items were products of the fisheries, potash, salted meat, live animals, and indigo. The imports were composed mainly of manufactures of sugar, molasses, salt, and beverages. Seybert characterized them as consisting "chiefly of articles which habit and fashion have made necessary for our consumption; but a small portion of them is subservient to our arts and manufactures."[3]

At this time, as during the colonial period, the trade of the United States was mainly with British countries; in 1790 nearly half of the exports from the United States went to Great Britain and her dominions, while those countries were the source of over three-fourths of the imports. Nearly two-thirds of the foreign trade of the United States was with countries under the British flag. The anticipated shifting of the foreign trade of the United States from England to France after the Revolution did not take place, although the relations of the United States with France were cordial until 1793. In spite of the political friction with Great Britain and of the fact that the British West Indies were closed to American ships, British countries offered the best market for the exports of the United States and English manufacturers and traders supplied the people of America with most of their imported

[1]Page 7. [2]*View of the United States of America*, 434.
[3]Seybert, *Statistical Annals of the United States*, 156.

manufactures. Nine-tenths of the imports from Great Britain, in 1790, consisted of manufactures, in exchange for which the United States exported chiefly food, naval stores, and materials for use in manufacturing.

Although Great Britain refused to enter into a commercial treaty with the United States until 1794, and insisted on regulating her trade with the United States arbitrarily by executive decrees, she really looked with favor upon the large trade with America as long as it could be so regulated as to consist chiefly of the exchange of British manufactures for raw materials, naval stores, and such provisions as Great Britain desired to import. The fact that American commerce was large and was handled by British merchants and in British ships also inclined Great Britain to regard the American commerce favorably. It is true that Great Britain refused to open the trade between the United States and the British West Indies to American shipping and declined to put American commerce on as favorable a footing as British commerce was; nevertheless, the people of the United States enjoyed more favors in their trade with Great Britain than were accorded to the countries of the continent of Europe. The policy of excluding foreign shipping from the British possessions was one which Great Britain had insisted upon ever since the adoption of the Acts of Trade in the middle of the seventeenth century.

Nevertheless, the feeling in the United States was strong against Great Britain for closing her West Indies to American ships and for refusing to entertain a favorable commercial treaty. There was much sentiment in favor of adopting retaliatory measures against Great Britain. Madison incorporated this policy in the tariff bill of 1789, and the House of Representatives passed the bill with this feature included; but the Senate refused to sanction the plan of discrimination against the country with which the United Srates carried on the major share of its foreign trade. Jefferson was also an advocate of retaliation against Great Britain, and in the report which he made, in June 1792, as Secretary of State, at the request of Congress, upon the "State of the Commercial Intercourse between the United States and Foreign Countries," he urged the policy upon Congress. Jefferson, however, was opposed by Hamilton, whose influence both in 1789 and in 1792 prevailed with Congress and President Washington. It was fortunate for the country that Madison and Jefferson failed in their efforts to persuade the United States, at the beginning of our trade expansion under the effective National Government established in 1789, to begin a commercial war against the nation with which the people of the United States chiefly traded. It would have been almost as serious a blunder as Jefferson made in 1807, when he influenced Congress to lay an embargo on all American trade with Great Britain and France—an act that injured the United States far more than it did the countries it was intended to punish.

What the domestic and internal trade of the United States was in 1790 is not known, because no records of it were kept. It is certain that the traffic handled coastwise was much larger than that by land routes. The original States were all maritime, and the larger share of their population, even in 1790, was on or near the seaboard. When water routes are conveniently accessible, freight can be moved on them more cheaply than upon the best of highways; and, as there were practically no good roads in the United States until after 1790, both intrastate and interstate traffic must, whenever possible, have been transported by boats. Fortunately, the rivers, bays, sounds, and natural harbors of the Atlantic seaboard greatly favored the coastwise trade.

Contemporaneous writings indicate that much traffic was handled in small craft along the New England seaboard and upon such protected waterways as Long Island Sound, the Hudson River the Delaware and Chesapeake estuaries and their affluent streams, and upon the Carolina rivers and sounds. Larger vessels carried traffic by the open sea between the New England and Middle States and between the northern and southern sections of the seaboard.

In 1789 the American tonnage enrolled for the coasting trade was over half that registered for the foreign trade; thereafter, for a number of years, the enrolled tonnage was about one-third of the registered. These figures for enrolled vessels do not include the considerable tonnage employed in the fisheries, nor the craft of less than 20 tons that were not required to enroll. It is probable that much local traffic was handled in boats of less than 20 tons register.

The ratio of the cargo tonnage of coastwise traffic to the cargo tonnage of foreign commerce would naturally be greater than the ratio of enrolled-vessel tonnage to registered tonnage, because the coastwise vessel, moving over a short route, would make more trips per annum than could the registered vessel engaged in the over-sea trade. Philadelphia, for example, had a relatively large foreign trade; but "the coasting vessels entered at the custom-house of Philadelphia in the year 1785 were 567 sail; all the other entries of sea-vessels in the same year were 501."[1]

In spite of the absence of improved highways, there must have been a good deal of local and interstate highway traffic. Naturally, bad roads would be used more regularly and frequently by travelers than by shippers. The stage coach upon unimproved roads could at least divide passenger traffic with the small coastwise sailing vessels, and thus there was regular stage service in 1790 between the principal cities of the United States. The establishment of a wagon freight service by public carriers, except in rare instances, could hardly ante-

[1] Coxe, *View of the United States*, 9 (note).

date the construction of good roads; and thus it may safely be assumed that such commodity traffic as was transported in wagons in 1790 was moved by the owners of goods being sent to, or brought from, the market.

Nevertheless, there must have been not only a local, but an interstate overland freight movement of some volume. "That interstate traffic by land had grown to considerable importance, before the meeting of the Constitutional Convention, is proved by the provisions in the tariff acts of the various States for regulating such traffic by duties upon goods thus brought into the several States, and by other measures."[1] As the population spread back from the seaboard into the interior of the States an increasing volume of goods had to be carried to and from distant markets by wagons. Sometimes the best market for an inland section would be within the same State, sometimes within an adjoining State.

STATUS OF THE FISHERIES.

The fisheries had been of basic importance to the foreign commerce of America during the colonial period. The condition of the industry at the close of the Revolutionary War is pictured as follows by Mr. Raymond McFarland:

"The fishing industry had been shaken to its foundation by a decade of inactivity and suspension. There had been rapid and disastrous depreciation of the property used for the furtherance of fishing interests. Wharves had fallen into decay, mainly through lack of trade to keep them in repair. Many vessels, too, had become valueless for the same reason; others had been employed in the privateering service, never to return as fishing vessels. Flakes and other shore apparatus used in curing fish had long since disappeared. Men, too, had lost the habit of their old vocation in following varying fortunes of service in the army and navy. The younger generation of boys had received little training in the shore fisheries, such as their fathers had, and none of them had acquired practical experience in deep-sea fishing by a trip to the Grand Bank as 'cut-tail' aboard a New England schooner."[2]

Nevertheless, in spite of the fact that the war had left the fisheries severely crippled, they seem to have recovered a large measure of their former prosperity during the ten years intervening between the close of the American Revolution and the outbreak of the continental wars in Europe. The cod fisheries, in particular, had probably regained the position they had held before the Revolution, but their development was held in check by the technical reservation of the British West Indies markets to Canadian and British fish. This policy was adopted by Great Britain in 1782 for the purpose of building up the fisheries of Canada, Nova Scotia, and Newfoundland, the rivals of the United States. The French government also discriminated against the fish-

[1] Brown, *The Commercial Power of Congress*, 2.
[2] *A History of the New England Fisheries*, 130.

eries of the United States by giving bounties to French fishermen and by imposing high duties on foreign fish. But the superior natural advantages possessed by the fishermen of the United States enabled them to compete for the markets of the French West Indies and obstacles placed in the way of trade with the West Indies by both France and England were often evaded just as they had been during the years preceding the Revolution. Thus the New England cod fisheries were able to survive and, though the margin of profit was small, the industry gradually expanded. Although the average tonnage of the New England cod-fishing fleet and the average number of men employed thereon during the five-year period from 1786 to 1790 were roundly 30 per cent less than during the decade preceding the Revolution,[1] the total tonnage reached by 1790 was considerably greater than the average amount employed during the prosperous years between 1765 and 1775.

The whale fishery, however, did not regain its former prosperity during these years. England had always supplied the chief market for American whale products and had encouraged the colonial whaling industry by preferential import duties. After the Revolution, however, the English market was absolutely closed to the whale products of the United States and, unable to find a profitable market for a large quantity of whale oil and whale bone either at home or abroad, the whaling industry remained in a depressed state. In 1774 there were 300 whaling-vessels having home ports in Massachusetts; in 1789 the number was slightly more than 100.[2]

Congress granted bounties to the fisheries by the tariff act of July 4, 1789, and by the acts passed in 1790, 1792, and subsequently. The provisions of these laws and the alternating progress and retrogression of the fisheries after the enactment of the laws are considered in Volume II. In general, the international events of the last decade of the eighteenth century did not give the fisheries of the United States the opportunity to expand that was afforded the foreign commerce and the shipping engaged in the carrying trade of belligerent countries in and after 1793.

CONDITIONS AFFECTING AMERICAN SHIPPING.

During the colonial period, American shipping had prospered. The coasting trade and most of the commerce of America with the West Indies were handled by the colonial merchants and their ships. In the trade with Great Britain the merchants and shipping of England had the advantage of the colonists and had most of the commerce. For the commerce with southern Europe, colonial ships were mainly used. The effect of the Revolutionary War was much more severe upon American

[1] *A History of the New England Fisheries*, 366.
[2] Tower, *A History of the American Whale Fishery*, 37, 42.

than upon British shipping, and when peace was restored, in 1783, the British merchants easily retained their superior position in the commerce between the United States and Great Britain; and in the same year, when the British Government closed the British West Indies to American shipping, the merchant shipping of the United States was seriously handicapped. The Congress, under the Articles of Confederation, was without power to regulate commerce or to aid shipping, and when the stronger National Government was established our maritime interests were still in a depressed though vigorous condition. Within a few years depression changed to prosperity.

The tonnage registered in the United States for the foreign trade in 1790 amounted to 346,254 tons. The enrolled coasting tonnage was 103,775, the fishing fleet included 28,348 tons, the combined total for the entire marine being 478,377 tons. During this year American vessels arriving from foreign ports made up 58.6 per cent of the total tonnage of entrances, and foreign vessels, mainly British, accounted for 41.4 per cent. That foreign shipping had not secured a larger share of American commerce during the trying years following the Revolution is proof of the maritime strength of the United States at that time.

In addition to the untoward political and monetary conditions from which the maritime and other industries of the United States were suffering at the close of the period of government under the Articles of Confederation, there were special disadvantages under which American shipping labored in competition with British shipping:

(1) Most marine insurance was written in England, and the rates on American vessels were usually higher than on those of British build. The insurance companies considered British vessels to be stauncher than American. Probably this was not the case, although the English ship was heavier and was more costly per ton of capacity than the American. It was felt by Americans, whether rightly or wrongly, that British patriotism had some influence upon marine insurance rates.

(2) The port charges which American ships had to pay in Great Britain were higher than British ships were required to pay in the ports of the United States. At the port of London, for instance, an American vessel of 160 tons register paid entrance and clearance fees ("light" money and "Trinity House" dues) of £9 6s. 2d. more than a British ship of the same tonnage would have to pay, in tonnage taxes and entrance and clearance charges, at an American port. Likewise, pilotage charges were lower in the United States. Furthermore, with the exception of the port of London, the charges at the ports of Great Britain were higher for American than for British ships, the American vessel's "light" and "Trinity House" charges being 1s. 9d. per ton greater.

(3) The restriction of the trade of the British West Indies to British ships reduced the profits of a relatively large share of American shipping. Prior to the Revolution the trade with the British and foreign West Indies had given employment to fully a third of the colonial shipping engaged in over-sea commerce. After the closing of the British West Indies to American ships, it became possible for the British merchants to dispatch their ships from England with cargo for the United States, to be exchanged there for exports to the West Indies, where a lading of sugar and other tropical products could be obtained for sale in Europe.

Congress promptly sought to offset these disadvantages of American shipping by the act of July 20, 1789, which placed much heavier tonnage taxes on foreign than on American ships, and which granted a rebate of 10 per cent in the duties payable on imports when the goods were brought into the country in American ships. It was estimated by British merchants that the discriminations imposed on their ships by the act of July 20, 1789, balanced the disadvantages under which American ship-owners competed with British shipping in the ports of Great Britain.

The discriminating legislation of 1789 and subsequent years undoubtedly was of great assistance to American shipping in meeting British competition. There was a steady, though not a phenomenally rapid, gain in the tonnage of the registered marine of the United States from 1790 to 1793, and a corresponding decline in the percentage of American commerce handled in foreign ships; but the rapid rise in the deep-sea tonnage under the American flag began in 1793–94 with the outbreak of the continental wars and with the consequent large opportunity for neutral carriers upon the high seas.

(4) In general, the commercial prospects were not especially promising in 1789 and 1790. Great Britain, with which country and with whose possessions the people of the United States had the major share of their trade, was actively hostile to American shipping. No treaty defining commercial rights and privileges could be made with Great Britain until 1794, and that treaty secured to the United States only a few of the privileges desired. The larger share of the foreign commerce of the United States was subject to such conditions as the British Privy Council might decree.

THE COMMERCIAL OUTLOOK IN 1790.

In 1790 it did not seem probable to the people of Europe, especially to the leaders of British political thought, that the United States would develop a large intercourse with other countries. Its trade with Great Britain was then less than at the beginning of the Revolutionary War; the American people were devoting most of their capital and labor to agriculture and were interested mainly in foreign trade as providing a market for their surplus products of agriculture. To such writers as

Lord Sheffield, the special champion of British shipping interests, it did not seem possible that any country could build up a foreign trade upon the basis of agricultural exports. European countries, under ordinary conditions, could at that time supply themselves with food products. Their purchase of grain from foreign countries was limited mostly to the years of small crops. It is true that the evidences of decline in British agriculture were plain, but still the British people had not then thought of becoming heavy purchasers of food.

American fisheries throughout the seventeenth and eighteenth centuries had provided the basis of a large foreign trade, but Lord Sheffield and the committee of the Privy Council that reported in 1791 felt certain that the fisheries of the United States would inevitably decline. The policy of Great Britain was to restrict all British markets to the British fisheries and, as this closed the largest export market for American fish, the prospect of continued commerce upon the basis of exported fish did not seem bright.

It was argued that, if there should develop a large European market for grain, England would not draw her supply from the United States; that the British settlements to the north and south of the United States would develop rapidly upon the stable political conditions existing in those sections; and that the people of the United States would not be able to compete successfully with Canada in supplying Europe with grain and lumber. It was likewise contended that Nova Scotia and Newfoundland would supply Europe and the West Indies with fish.

Nor did Lord Sheffield and the British Government think it possible for the people of the United States to establish a large trade with China and with the Orient. It was thought that the people of the United States were still too poor to provide a large market for "Asiatic luxuries," and thus the large direct trade which subsequently came into existence between the United States and the Orient was not foreseen.

It is, of course, clear that this pessimistic view of the future development of the commerce and fisheries of the United States was due to ignorance of the real industrial and commercial strength of the country in 1790; but one had to look below the surface to see what the future had in store. American commerce, shipping, and fisheries had contended against adverse conditions for most of the time since the outbreak of the Revolutionary War. The establishment of a vigorous national government with power to regulate commerce was encouraging, but it was too early to determine whether American traders, vessel-owners, and fishermen could prevail in competition with their rivals in Great Britain. In 1790 no one could foresee that three years later a long war would begin, involving most of the countries of Europe, and that American merchants and ships would consequently be given an opportunity to make great profits as neutral traders and carriers.

CHAPTER XXIII.

THE FIRST QUARTER CENTURY, 1790 TO 1815.[1]

Activity in the foreign trade from 1790 to 1807, 14. Reasons for growth of export trade, 15. General growth of exports and imports, 20. Growth of Oriental trade and extension of trade into distant countries, 25. Growth of the carrying trade, 27. Decline of foreign trade and shipping, 1807–1815, 29.

By the time the Federal Constitution went into operation in 1789, the dullness which had characterized the foreign trade of the American Confederation during the years that ensued shortly after the conclusion of peace with Great Britain was almost overcome. A brisk foreign trade arose, the previous pessimism of the merchants and ship-owners was replaced by general optimism, and the unusual profits of trade and shipping drew into the foreign trade many who had formerly been engaged in other pursuits. Timothy Pitkin, one of the ablest of contemporary writers, recorded the surprising growth and effects of the foreign trade as follows:

"The increased demand for the agricultural productions of this country, during the period under review, raised their price to a height before unknown. This, as well as the trade in foreign productions necessarily created a demand for shipping, and agriculture, commerce and navigation, became the most lucrative employments, and almost exclusive objects of pursuit in the United States."[2]

During the later years of the period considered in this chapter, international reprisals and embargoes, the second war with England, and the restoration of peace in Europe adversely affected the American merchant and ship-owner. The quarter century 1790 to 1815 witnessed a complete commercial cycle in which the foreign trade underwent a distinct rise and fall.

The years of growing foreign trade, which extended from 1790 to 1807, were unique in that there has never been since, in the history of the United States, a period of such length in which the foreign trade so completely absorbed the attention of a large portion of the people and exercised so vital an influence on industry in general. The wider European market for foodstuffs caused a rise in the price of agricultural crops and a flow of capital and labor to the farms. Rising profits caused a similar flow into the shipping and carrying trades, and the brisk demand for deep-sea vessels revived the prosperity of the ship-building industry. Little progress was made in the manufacturing industries, however, during these years of growing foreign trade. The profits in agriculture, shipping, vessel operation, and ship-building were more attractive, and the rise in exports was accompanied by a growth

[1]This and the succeeding chapters in this part were written by G. G. Huebner.
[2]*A Statistical View of the Commerce of the United States*, 372.

in the imports of European finished manufactures. The manufacturing industries did not become the object of special attention, until the embargoes and restrictive commercial policy, which became effective in 1807, ended the 18-year period of prosperous foreign trade and suddenly deprived the United States of many necessary articles previously obtained from abroad. It was not until then that the Federal Government endeavored to ascertain the state of the manufacturing industries of the country. In 1810 the value of their product was placed by the census at $145,385,000. An estimate made by Tench Coxe placed the total value of all the manufactures of the country, including those of households, at $198,614,000. It is probable that the value of the entire manufacturing product was not over $200,000,000.[1] The fall in the foreign trade after 1807 gave the first great impetus to the home production of manufactures. After peace had been declared and European imports again entered American harbors, the so-called "American system" or protective-tariff doctrine rapidly gained ground and became a vital factor in the commercial policy of the nation.

REASONS FOR GROWTH OF EXPORT TRADE.

There were several reasons for the sudden change from the commercial depression of the years immediately following 1785 to the animated export trade which arose after 1789.

The adoption of the Federal Constitution in 1789 was an event of the highest commercial significance; it meant that the loose confederation was replaced by a real Federal Government. American ministers abroad had repeatedly found that foreign nations were "sensible of the weakness and inefficiency of the American Confederacy" and therefore refused to enter into commercial treaties or even to treat American merchants and ship-owners with the fairness accorded to those of other countries. John Jay, the American agent to England in 1785, referred to the situation as follows:

> "This being the state of things, you may depend upon it, the commerce of America will have no relief at present nor, in my opinion, ever, until the United States shall have generally passed navigation acts. If these measures are not adopted, we shall be derided, and the more we suffer, the more will our calamities be laughed at."[2]

The views of two contemporary writers of note, Timothy Pitkin and Adam Seybert, are especially instructive. Timothy Pitkin stated:

> "This unfortunate state of American commerce, it is well known, was one of the principal causes of the adoption of the present Constitution. The acts passed by the first Congress that met, under the new form of government,

---

[1]This is an estimate by the U. S. Department of Commerce and Labor, in *Exports of Manufactures from the United States and their Distribution, 1800 to 1906*, p. 5.

[2]Letter to American Secretary of Foreign Affairs, October 21, 1785.

imposing the discriminating tonnage, and other duties, did not escape the particular notice of British statesmen. Their injurious effects upon the navigating interest of Great Britain were, at once, perceived by them. They saw that American commerce was no longer at the mercy of thirteen distinct legislative bodies, nor subject to the control of the King and Council."[1]

Adam Seybert wrote as follows:

"Surrounded by difficulties, it became a paramount duty to cure the palsy which afflicted us at home. It was manifest, that general regulations were essential to the safety and welfare of the Union; it was absolutely necessary, that the power to regulate and control our intercourse with foreign nations, should be confided to Congress alone; and it was that conviction, which, principally, induced the people of the United States to call the Convention to revise the articles of the Confederation."[2]

By giving to the Federal Government the exclusive control over the "commerce with foreign nations, and among the several States, and with the Indian tribes," the Constitution laid the basis for removing the great political and governmental obstacles to prosperity in the foreign trade. Articles of commerce could thereafter move freely from one State to another and reach the ports of export without hindrance. The diverse system of import duties and navigation charges and regulations imposed by the individual States was replaced by a uniform national policy. The first Congress which met under the new form of government enacted a tariff and navigation act designed to promote foreign trade and ocean navigation. For the encouragement and promotion of the American deep-sea carrying trade, the act of July 1789 granted a 10 per cent discount from the duties on all goods imported in American vessels, and the same law reduced the duties on tea imported from India and China in American vessels as compared with the duties on tea imported from Europe or in foreign vessels, so as to build up the direct trade between the United States and the Orient. Though slightly changed from time to time, this act extending aid to Oriental commerce and protection to the American merchant marine was in force throughout the entire quarter century from 1789 to 1815, and, as is more fully pointed out hereafter, its effects upon the foreign trade and the American merchant fleet were highly beneficial. In 1804 Congress further extended the policy of shipping protection by levying a "light money" tonnage duty of 50 cents per ton on foreign vessels.[3]

After the adoption of the Federal Constitution, moreover, foreign nations could no longer scorn requests for commercial treaties and trade arrangements. The trade with Great Britain had since 1783 been carried on according to the Orders in Council authorized by the Parliamentary act of April 1783, no commercial treaty being concluded

[1] *A Statistical View of the Commerce of the United States*, 191. [2] *Statistical Annals, 1818*, p. 58.
[3] This was raised to $1.50 in 1812 as a war revenue measure.

until November 1794. The so-called Jay treaty, which was concluded at this time, provided that no higher tariff duties should be paid by either country than were paid by all other countries, with the reservation on the part of England permitting Parliament to levy tonnage duties on American vessels as high as those paid by British ships in American ports, and tariff duties which would be adequate to countervail the discriminating duties payable on goods imported into the United States respectively in American and foreign ships. Although this treaty, which was not enforced until 1797 and the trade sections of which expired in 1804, never proved satisfactory to the United States, because it did not place American and British vessels and merchants in the West India trade on an equal footing and did not prevent the British Government from levying countervailing duties designed to offset the discriminations which existed in the American tariff laws, it was nevertheless a concrete illustration of the difference between the power of the Confederation and that of the Federal Union. In 1795 the Federal Government negotiated with Spain a treaty which granted the right of free navigation of the Mississippi River to the people of the United States. A treaty of commerce and navigation was concluded with France in September 1800, as were also a secret treaty concerning Louisiana in October 1800 and the Louisiana cession treaty, which in April 1803 finally solved the problem of the free navigation of the Mississippi River. A commercial treaty was concluded with Prussia in July 1799; and in 1795, 1796, and 1805, after much negotiation and some naval warfare, treaties of commerce, peace, and amity were entered into with Tripoli and Algiers, the piratical African Barbary States.

The adoption of the Constitution, which enabled Congress to promote American trade and navigation by legislation, was followed by the gradual acquisition of a navy to protect the merchant and ship-owner against foreign enemies. The few armed vessels which were the property of the United States Government at the end of the Revolutionary War had been sold by order of Congress.[1] The depredations on American commerce by the Barbary pirates, which had been made during the period of the Confederation, greatly increased after 1793, when Portugal, under a truce with the regency of Algiers, withdrew the squadron of warships which had occupied the Straits of Gibraltar. The attacks on American merchant ships, which had practically no men-of-war to protect them, became so serious that Congress authorized the construction of a small fleet. The unusually violent attacks of the Barbary pirates in 1801 caused the United States to deal swift and vigorous punishment. By 1805 the American naval forces had compelled all of the Barbary powers to agree to cease their depredations on American merchant vessels.

[1] Act of June 3, 1785.

The building of a war fleet was also hastened by the hostile attitude of France and Great Britain, whose naval vessels at various times during the European wars seized American merchant ships on the pretext that they violated the then indefinite and flexible laws of neutrality. During 1799 and 1800 several American warships were used effectively in a brief naval war with France. The prompt and vigorous measures of the newly established government in defense of its commercial rights soon compelled France to seek peace, and at the same time instilled in other foreign nations an increased respect for the American flag. When later the seizure of American ships, the exercise of the right of search, the indiscriminate imposition of blockades, and other acts of England and of France became unbearable, the War of 1812 ensued and Europe was given more convincing evidence of the intention of the new government to protect American foreign trade and navigation.

The adoption of the Constitution and the inauguration of the policy of aid and protection by the Federal Government were accompanied by other economic influences which were responsible for much of the immediate growth in foreign commerce. Foremost among these were the extended European wars, which began in 1793, shortly after the outbreak of the French Revolution, and were not finally concluded until 1814. At first these wars concerned chiefly Great Britain and France, but gradually nearly all the nations of the Old World were drawn into the controversy. What was all but commercial death to the European merchant and ship-owner meant profit to the American, for the wars cut off the usual channels of European trade so effectively that to obtain many of their customary imports the warring nations were obliged to turn to the United States, a neutral power. When the European wars were at their height American shipping was prosperous; when in 1802 and 1803 there was a brief period of peace, it suffered an immediate decline; when the wars were renewed, prosperity returned for a time, until after 1807, when Napoleon Bonaparte, refusing to recognize that there were any neutrals, inflicted his "continental policy" upon the commercial world, and England enforced her Orders in Council with men-of-war. Under the burdensome restrictions imposed by the commercial policies of France and Great Britain, American vessels and American trade suffered almost as severely as those of European neutral countries. When neutrality was denied exports carried in American ships, the highly profitable business of the ship-owners, merchants, and ship-builders of the United States was interrupted.

The European wars were accompanied by European crop failures and insufficient food. Although the most rapid increase in the foreign trade after 1790 was in the reexportation to Europe of foreign products which American merchants and vessels gathered from the West Indies, South America, the Orient, and other parts of the world, there was

also an increase in the shipments of domestic foodstuffs to Europe, where crop failures occurred at various times and where the effects of shortage were largely enhanced by the necessity of feeding immense armies of soldiers.

Partly as a result of the European wars and the abnormal demand for American foodstuffs abroad, there was an increase in the output of agricultural products in the United States. During the first decade after 1790 the growth in agriculture was chiefly east of the Alleghenies and the surplus was readily exported. The effect of the heavy export trade upon food prices is illustrated by the prices of flour at Philadelphia, which was then a typical market. The average price from 1785 to 1793 was $5.41 per barrel, while the average price from 1793 to 1807 (excluding the years 1802 and 1803, when Europe was at peace) was $9.12 per barrel, a difference of $3.71.[1] It is noteworthy that during the years 1820 to 1828, after the trade and industry of Europe had returned to its ordinary channels, the average price dropped back to $5.46. After 1800, when the foreign trade received numerous setbacks, westward emigration revived, the volume of foodstuffs produced in the country west of the Alleghenies also increased rapidly, and great quantities of flour, grain, and provisions were sent down the Mississippi River to be exported to Europe from New Orleans. After 1803 the exports from the Michigan territory exceeded those from such States as New Hampshire, Vermont, and Delaware; and in 1807, when the export trade moving down the Mississippi River from the Middle West was at its height, the value of the shipments to foreign markets from New Orleans aggregated $4,321,000.

The banking and credit situation was greatly improved after 1790. In the past the absence of adequate credit in the countries of continental Europe had tended to limit the import trade largely to England, where credit relations had long been established.[2] By restricting the imports from the markets of continental Europe, the insufficiency of credit had also had an unwholesome effect upon American exports to those markets. Inadequate banking facilities had, moreover, exerted an unfavorable influence upon investments in agriculture, shipping, and other industries. When the Constitution was adopted, the only banks in the United States were the Bank of North America, the Bank of New York, and the Bank of Massachusetts. In February 1791, however, Congress created the Bank of the United States. The charter of this institution expired in March 1811, but before its termination many State banks were established. From a total of 3 State banks in 1791, with a capital of $2,000,000, the number grew to 88 in January 1811, and the capital to $42,610,000; and in January 1815 there were 208 State banks, with an aggregate capital of $82,259,000.

---

[1] Pitkin, *A Statistical View*, etc., 373. [2] Coxe, *A View of the United States of America*, 128.

GENERAL GROWTH OF EXPORTS AND IMPORTS.

Table 44 indicates how the value of the export trade, inspired by the events enumerated above, rapidly advanced from slightly over \$20,200,000 in 1790 to over \$94,100,000 in 1801, how it was then depressed for a few years because of temporary peace in Europe, and thereafter rose again, reaching its climax in 1807 with a total of \$108,343,000.

TABLE 44.—*Total foreign trade of the United States, 1790–1815.*[1]

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports retained for domestic consumption.	Total imports.
1790	\$19,666,000	\$539,000	\$20,205,000	\$22,461,000	\$23,000,000
1791	18,500,000	512,000	19,012,000	28,688,000	29,200,000
1792	19,000,000	1,753,000	20,753,000	29,747,000	31,500,000
1793	24,000,000	2,110,000	26,110,000	28,990,000	31,100,000
1794	26,500,000	6,526,000	33,026,000	28,074,000	34,600,000
1795	39,500,000	8,490,000	47,990,000	61,267,000	69,756,000
1796	40,764,000	26,300,000	67,064,000	55,136,000	81,436,000
1797	29,850,000	27,000,000	56,850,000	48,379,000	75,379,000
1798	28,527,000	33,000,000	61,527,000	35,552,000	68,552,000
1799	33,142,000	45,523,000	78,665,000	33,546,000	79,069,000
1800	31,841,000	39,130,000	70,971,000	52,122,000	91,253,000
1801	47,473,000	46,642,000	94,115,000	64,721,000	111,364,000
1802	36,708,000	35,775,000	72,483,000	40,558,000	76,333,000
1803	42,206,000	13,594,000	55,800,000	51,073,000	64,666,000
1804	41,467,000	36,232,000	77,699,000	48,768,000	85,000,000
1805	42,387,000	53,179,000	95,566,000	67,421,000	120,600,000
1806	41,253,000	60,283,000	101,536,000	69,127,000	129,410,000
1807	48,700,000	59,643,000	108,343,000	78,856,000	138,500,000
1808	9,433,000	12,997,000	22,430,000	43,993,000	56,990,000
1809	31,406,000	20,797,000	52,203,000	38,602,000	59,400,000
1810	42,366,000	24,391,000	66,757,000	61,009,000	85,400,000
1811	45,294,000	16,022,000	61,316,000	37,377,000	53,400,000
1812	30,032,000	8,495,000	38,527,000	68,535,000	77,030,000
1813	25,008,000	2,847,000	27,855,000	19,157,000	22,005,000
1814	6,782,000	145,000	6,927,000	12,820,000	12,965,000
1815	45,974,000	6,583,000	52,557,000	106,458,000	113,041,000
1816	64,782,000	17,138,000	81,920,000	129,964,000	147,103,000
1817	68,313,000	19,358,000	87,671,000	79,892,000	99,250,000

[1]Seybert, *Statistical Annals*, 93; DeBow, *Statistical View of the U. S.*, I, 326; Pitkin, *A Statistical View*, 35.

The most rapid growth and most violent fluctuations occurred in that portion of the export trade which consisted of the reshipment of foreign products. Being neutral, the vessels of the American flag were, with occasional interruptions, permitted to reexport to continental European countries and to England the large quantities of sugar, tea, coffee, cocoa, pepper, and other tropical and subtropical articles and the gold and silver specie and bullion which American merchants obtained in the West Indies, South America, the Orient, and other parts of the world. In times of peace these articles were shipped directly from the producing countries to European destinations

in foreign vessels. They were now shipped to American ports in American vessels, subjected to the payment of import duties, and then reshipped in American vessels after receiving a drawback of all but a small part of the duties that had been collected. This indirect process gave to the foreign cargoes thus reexported the stamp of neutrality. In the case of the British East India trade, the treaty of November 19, 1794, provided "that vessels of the United States shall not carry any of the articles exported by them from the said British territories to any port or place except to some port or place in America, where the *same shall be unladen.*" In accordance with this treaty clause it was a common practice for American ships to proceed to the British East Indies, either direct from Europe (if the war permitted) or by way of an American port, and to return to Europe after having "unladen" their East India cargoes at an American port, paying the required import duties, receiving a drawback, and reshipping the temporarily unloaded cargoes.

European and English products were also brought to American ports and reexported in American bottoms to the various outlying dominions of England and other European powers. In 1805, for example, the reexports of foreign products to the Spanish West Indies and American colonies of Spain were valued at $8,476,000, while the shipments of domestic commodities amounted to but $2,391,000.[1]

The value of the total reexport trade advanced from $539,000 in 1790 to $46,642,000 in 1801; it then declined for a few years while peace prevailed in Europe; but when the wars were resumed, it again increased, reaching a maximum of $60,283,000 in 1806. Never before or since has the reexport trade reached such proportions. As is shown in table 44, during many of these years it was greatly in excess of the entire foreign trade in domestic products.

Though the export trade in purely domestic commodities increased less rapidly than the reexport trade, yet it also felt the favorable influence of the events enumerated above. From a value of $19,666,000 in 1790, the exports of domestic commodities rose to a value of $48,700,000 in 1807. Of the amount for the later year, $37,832,000 consisted of agricultural products, $5,476,000 of forest products, $2,804,000 of products of the sea, and $1,652,000 of manufactures. There were numerous changes in the relative importance of the commodities entering the export trade. In the North Atlantic States the products of the sea lost the lead to products of agriculture. Flour, wheat, corn, and provisions found a ready market in southern Europe, where crop failures were most frequent and the ravages of war most disastrous, and more than the usual shipments were made also to Holland, the Hanse Towns, England, and the West Indies. The exportation of fish to South European and West Indian markets continued, but the fish

[1] Seybert, *Statistical Annals*, 136. Corresponding figures in trade with French West Indies were $3,975,000 and $2,770,000, respectively.

trade was not as large as the trade in agricultural products. Naval stores, furs, and skins likewise lost their former high position in the foreign trade of the North Atlantic States, but the losses occasioned by their decline were more than made good by the increase in the exports of the other important forest products—lumber and pot and pearl ashes. For lumber in particular a spirited demand arose on account of the European wars, the exports increasing steadily until in 1811, when they reached a value of $3,195,000 out of a total value of $5,286,000 for all the forest products exported that year. In the South the tobacco export trade continued to maintain an annual value of over $6,000,000. Southern rice also found a ready market in England, Holland, Bremen, and Hamburg, but the indigo trade of South Carolina and Georgia almost disappeared and the export trade in southern naval stores made little headway. A new southern export, however, a commodity destined to exercise a more potent influence on the economic and political history of the country than any other product of its soil, was making its first advance toward a position of importance in the foreign trade. This product was cotton. After the invention of the cotton-gin in 1793, the success of cotton production was so pronounced that by 1803 tobacco, which had been the great staple of the South for nearly two centuries, lost its leadership and cotton became the king of southern exports. It was shipped to Great Britain, France, Holland, Germany, Russia, Sweden, Spain, and a few minor markets, the total exports rising from a value of $5,250,000 in 1802 to $15,108,000 in 1810, and $17,529,000 in 1815. Of all the events influencing the development of foreign trade during this period, none has contributed more to its permanent increase than the invention of the Whitney cotton-gin.

The export trade continued to center very largely in the old Atlantic States which had always led in foreign commerce, but important changes in their relative position occurred. The paramount position of the Southern States of Virginia and Maryland was definitely yielded to the North Atlantic States of New York, Massachusetts, and Pennsylvania. Pennsylvania, however, which at the beginning of this commercial era led all the other States in the volume of exports, soon fell behind New York. During the period 1790 to 1800 the largest volume of exports was shipped from New York, which was followed by Pennsylvania, Maryland, Massachusetts, and Virginia, in their respective order. During the next decade the position of these States remained unchanged, except that Pennsylvania lost precedence to Massachusetts.[1]

Meanwhile, after the year 1800, as was mentioned above, the farming regions beyond the Alleghenies, which had formerly shipped small

[1]Evans (compiler), *Domestic Exports, 1789–1883*, p. 98; DeBow, *Statistical View of the United States* (Compendium of U. S. Census, 1854), p. 187.

quantities of farm and forest products to the Eastern States and occasionally to the West Indies, southern Europe, and the Mediterranean islands by way of New Orleans and Mobile,[1] became a more important factor in the export trade. The export trade of Tennessee and Mississippi dates from 1801, that of Kentucky and Indiana from 1802, of Michigan from 1803, Orleans Territory 1804, and Ohio 1806.[2] The products of these newly opened regions had to be floated down the Mississippi River and be transshipped at New Orleans, but, in spite of the serious handicap of inadequate transportation,[3] increasing quantities of provisions, flour, grain, whisky, and forest products were shipped to Europe. The exports from New Orleans, including those originating in the adjacent region as well as those received from the Middle West in 1807 ($4,321,000), exceeded those from eastern and southern States, such as Georgia, North Carolina, Connecticut, Rhode Island, and New Hampshire, the merchants of which had long been engaged in the foreign trade and were within easy reach of the Atlantic seaboard.

The abnormal increase in the export trade was accompanied by a rapid growth of foreign imports. The total value of the commodities imported advanced from $23,000,000 in 1790 to a maximum of $138,500,000 in 1807. (See table 44.) Since this included vast quantities of commodities which were imported merely to be reshipped abroad as neutral goods, the real increase in imports is more fairly represented by those imported products which were retained for consumption in the United States. But the value of this branch of the import trade also advanced from $22,461,000 in 1790 to $78,856,000 in 1807. Throughout this entire era of active foreign trade the imports retained for home consumption always exceeded the exports of domestic products, and the total import trade at all times exceeded the total export trade by many millions.

The leading items in the import trade were European and English manufactures, consisting chiefly of metal goods, woolen, cotton, linen, and silk textiles, and glass, paper, leather, earthen, and other miscellaneous finished products. English manufactures continued to dominate the American market, but the fabrics and metal goods of continental Europe, especially those of Germany, were received in large quantities, and at various times threatened to drive out those of Great Britain. The remaining imports consisted mainly of luxuries and other articles for domestic consumption. Sugar, molasses, rum, and coffee were brought from the West Indies; wines from southern Europe; specie and bullion from Mexico, the West Indies, Peru, and many other lands; teas, silks, paper, and general spices from the Orient; hides and skins, coffee, and indigo from South America.

---

[1] U. S. Census, 1880. *History and Present Conditions of New Orleans*, 11–21; DeBow, *Industrial Resources of the Southern and Western States*, III, 480; I, 48.

[2] DeBow, *Ibid.*, I, 316.

[3] For discussion of the opening of the Mississippi River for western navigation, see vol. I, chap. xiii.

The apparently unfavorable balance of trade had little trade significance. Adam Seybert, the contemporary writer previously referred to, wrote as follows:

"Our commerce with all parts of the world collectively taken, has produced an apparent unfavorable balance, amounting to $15,229,000 per annum; but this sum we find, was counter-balanced by the profits for freight alone. That the foreign commerce of the United States was very profitable, is evident from the general improvement of the country, the conditions of the people, and the extension of our cities in every state of the Union. Besides the gain for freight, our merchants received considerable sums for commissions and charges; and it has been ascertained, that great profits were made on the merchandise which they disposed of in Europe. To the above mentioned, we must add considerable sums remitted to us in specie from the West Indies and South America, of which our custom-houses make no returns. That much bullion and coin were brought into the United States is proved by the amount of our exports to China and the East Indies."[1]

The great bulk of the foreign trade—export as well as import—centered in the long-established markets of England, Continental Europe, and the West Indies. Relative to the total foreign trade of the United States, the West Indies lost the leading position which they had held in the commerce of the American colonies, but were second only to England and Europe as markets for American exports and as sources of a lucrative import trade. The least progress was made in the British West India trade, which continued to be hampered by British restrictions. Prior to 1794, American vessels were excluded from the British West Indies, the policy of England being to enable British ships to engage in a triangular trade between England, the United States, and the British islands. An article of Jay's treaty as drafted provided that American vessels "not being above 70 tons" should be permitted to enter the trade on condition that they would not carry molasses, sugar, coffee, cocoa, or cotton to any part of the world except the United States; but this article of the treaty was rejected by the United States Senate and the trade with the West Indies remained technically open only to British vessels. The pressure of the wars, however, compelled England from time to time to open her West India ports to American vessels, and from 1795 to 1807 exports valued at from $2,147,000 to $9,699,000 were annually shipped to these islands and imports valued at from $2,925,000 to $6,968,000 were received from them.[2]

The trade with the French, Dutch, Danish, and Spanish West Indies was highly prosperous until 1807, when the American reexport trade to Europe was restricted and the French islands fell into British control. The imports received in each case far exceeded the exports shipped from the United States to the islands. The restrictions of the French colonial policy were partially withdrawn in 1793, and the French West India ports were opened to American merchants and

[1] *Statistical Annals*, 281. [2] Pitkin, *A Statistical View*, 193, 211.

vessels. During the years 1795 to 1807, the annual shipments from the United States to the French Islands were valued at from $2,776,000 to $7,148,000, the bulk of which consisted of foreign (European) produce; and the products annually imported from the French West Indies were valued at from $2,022,000 to $15,751,000, most of which were reshipped to Europe. Similar amounts were annually imported from and exported to the Spanish West Indies, while the trade with the Dutch and Danish West Indies was smaller in volume.

GROWTH OF ORIENTAL TRADE AND EXTENSION OF TRADE INTO DISTANT COUNTRIES.

Though the great bulk of the foreign trade of this quarter century was carried on in the long-established markets of European countries and the West Indies, there was at the same time a spectacular growth of American trade in the Orient, which was in many respects one of the most noteworthy features of the early commercial history of the United States. This trade had its beginning during the previous period.[1] As early as 1789 there were as many as 47 American vessels trading at one time beyond the Cape of Good Hope. In that year Congress enacted a tariff law explicitly designed to promote the Oriental trade and to confine it to American ships. It levied duties[2] of 6 to 20 cents per pound on tea brought direct from India and China in American vessels, while the duties on tea imported indirectly by way of Europe ranged from 8 to 26 cents, and those on tea imported in foreign vessels ranged from 15 to 45 cents per pound. The duties on other Oriental commodities, when imported in foreign vessels, were likewise almost twice the duties on goods imported in American ships.

It was from the Oriental trade that the famous "merchant princes" of the day secured their large fortunes. In this trade they employed their most shrewd and daring captains and their best ships, and on the rich cargoes which their vessels brought home from the East they realized their greatest profits. Furthermore, many of the Oriental products formed the basis of new domestic industries, such as silk finishing, morocco leather, and dyeing.[3] Teas, silks, nankeens, and chinaware from Canton; coffee, pepper, and other spices and low-priced cotton goods from British India were imported in large quantities. In addition to the ready home market found in the Atlantic Coast States, the European wars, as was explained above, opened an even greater foreign market. The total direct imports from the British East Indies grew from a value of $742,500 in 1795 to $3,391,000 in 1800, and had an annual average of $3,106,000 during the six years 1802 to 1807; those from the Dutch East Indies advanced from $26,700 in 1795 to $4,431,000 in 1801; and those from China grew from $1,023,000 in 1795 to $4,613,000 in 1800 and $5,745,000 in 1810.

[1] See vol. I, chap. xi, p. 185.

[2] G. G. Huebner, "Tariff Provisions," etc., in *Annals of American Academy of Political and Social Science*, May 1907, p. 61; also *infra*, II, chap. xli.

[3] See Soley, in Shaler, *United States of America*, I, 525; Chase, *Report*, 35.

The exports of merchandise to China and the East Indies increased somewhat, but were almost negligible in volume. During the years 1795 to 1807 they ranged from $261,700 to $2,129,000 per year, and consisted mainly of foreign products—opium, woolen and cotton goods, and quicksilver. The chief domestic merchandise shipped to the East consisted of furs, ginseng, cotton goods, and raw cotton to China; and flour, whale oil, candles, timber, lumber, and tobacco to the East Indies. Most of the shipments to the Orient consisted of gold and silver specie, and much of this was obtained from abroad. The primary object of this early Oriental trade was to build up large fortunes by the sale of Oriental imports in the United States and Europe, rather than to find markets for American exports. In China the trade was conducted through the famous "Chinese Hongs;" and in the East Indies it was likewise mostly a bartering trade with native merchants. Productive of great profits, but often of great losses, uncertain and surrounded by constant difficulties, the romantic trade with China and the East Indies immediately after the formation of the Union was by far the most interesting feature of early American commerce.

China and the East Indies (including British India) were foremost in the newly established commerce, but American trade was also extended to other distant countries. As early as 1790 a small trade was conducted as far north as Japan; and direct trade with the Philippine Islands began about 1796, when Elias Hasket Derby, of Salem, obtained a cargo of sugar, pepper, and indigo at Manila.[1] The sandalwood trade with the Hawaiian Islands, which began as a link in the Chinese trade via the northwest Oregon coast in 1789, increased after August 1790, when the *Columbia* returned to Boston after having completed a successful voyage via Cape Horn to the Oregon coast, Honolulu, and Canton.[2] The trade at the Cape of Good Hope, in Turkey, the Levant, Egypt, Senegal, the northwest coast of North America, Bourbon, Mauritius, Honduras, Campeachy, Morocco, and the Barbary States was now regularly listed in the customs records.[3] Though acts restricting the African slave trade were passed in 1794, 1798, 1800, 1803, and 1807, this trade also continued to flourish. To Charleston and other southern ports came dozens of shiploads of enslaved negroes who were purchased or kidnaped on the African coast and carried directly to the United States to be used on the cotton plantations. Many of the vessels engaged in the slave trade belonged to people of New England and New York, who reaped large profits from their nefarious traffic.

---

[1]Marvin, *The American Merchant Marine*, 204.
[2]*Ibid.*, 68; Carpenter, *America in Hawaii*, 29–35; Jarvis, *History of Hawaiian Islands*, 68–79; Blackman, *The Making of Hawaii*, 187.
[3]Seybert, *Statistical Annals*, 132–140.

GROWTH OF THE CARRYING TRADE.

No phase of the foreign trade during the prosperous years 1790 to 1807 was more noteworthy than the rapid growth of the carrying trade. The bases upon which the marine and ship-building industries of the country rested, were, as during colonial days, the abundant supply of timber and naval stores suitable for the building of cheap and excellent wooden vessels, the natural maritime instincts of a large portion of the inhabitants, and a coast line indented with scores of natural bays and harbors. The unusual growth of the carrying trade at this particular time, however, was due largely to the extraordinary opportunities arising from the circumstances referred to above. Quick to embrace these opportunities, the American ship-owners pushed their advantage to the utmost and enjoyed a degree of prosperity never before or since equaled.

The adoption of the new form of government in 1789 tended to restore the confidence and credit which are essential to the development of maritime industries, and the newly acquired navy, though small, afforded a certain amount of protection to American merchant ships. The provisions which from 1789 to 1815 were incorporated in the tariff laws, granting a discount of 10 per cent of the duties on all goods imported in American ships and especially favoring American vessels in the Oriental trade, practically restricted most of the ordinary deep-sea traffic of the United States to the American flag. Great Britain imposed countervailing duties which to some extent offset the effects of the policy of shipping protection, the Committee on Commerce and Manufactures of the House of Representatives admitting that "Great Britain by her countervailing acts has secured effectually the carrying (for her own wants and her foreign commerce) of our fish, oil, tobacco, pot and pearl ashes, rice, indigo, and cotton." The countervailing restrictions of England, however, were effective only during times of peace, which from 1790 to 1814 were infrequent and short-lived. On the whole, the policy of protection to shipping tended to increase the American carrying trade. As stated by Adam Seybert:

"Our discriminations operated powerfully in favor of our shipping. . . . Those extra charges were sufficient to drive from our ports, the greatest proportion of the foreign tonnage. All foreign nations were affected by the system we had adopted; it seemed to operate like magic in favor of ship-owners in the United States."[1]

The European wars, even more than the policy of shipping protection, gave a most powerful impetus to the American carrying trade at this particular time, for they effectively locked the merchant ships of the great commercial powers of Europe in their harbors. Professor J. B. McMaster picturesquely describes the situation:

[1] *Statistical Annals*, 294.

"Almost the whole carrying trade of Europe was in their (American) hands. . . . The merchant flag of every belligerent, save England, disappeared from the sea. France and Holland absolutely ceased to trade under their flags. Spain for a while continued to transport her specie and her bullion in her own ships protected by her men-of-war. But this too she soon gave up, and by 1806 the dollars of Mexico and the ingots of Peru were brought to her shores in American bottoms. It was under our flag that the gum trade was carried on with Senegal, that the sugar trade was carried on with Cuba, that coffee was exported from Caracas, and hides and indigo from South America. From Vera Cruz, from Carthagena, from LaPlata, from the French colonies in the Antilles, from Cayenne, from Dutch Guiana, from the isles of France and Reunion, from Batavia and Manila, great fleets of American merchantmen sailed from the United States, there to neutralize the voyage and then go on to Europe. They filled the warehouses at Cadiz and Antwerp to overflowing. They glutted the markets of Embden and Lisbon, Hamburg and Copenhagen, with the produce of the West Indies and the fabrics of the East, and, bringing back the products of the looms and forges of Germany to the New World, drove out the manufactures of Yorkshire, Manchester and Birmingham."[1]

Table 45 shows how rapid was the growth of the carrying trade.

TABLE 45.—*Statistics of shipping engaged in the carrying trade of the United States, 1789-1815.*

Year.	Total tonnage[1] in foreign trade of United States.	Tonnage of American vessels in foreign trade.	Proportion American.	Value of foreign trade—proportion in American vessels.[2]		
				Imports.	Exports.	Total.
1789	[3]233,983	[3]127,329	54.4	17.5	30	23.6
1790	603,825	355,079	58.6	41.0	40	40.5
1793	611,320	447,754	73.3	82.0	77	79.5
1795	637,109	580,277	91.1	92	88	90
1800	806,753	682,871	84.6	91	87	89
1805	1,010,141	922,298	91.3	93	89	91
1807	1,176,198	1,089,876	92.7	94	90	92
1810	986,750	906,434	91.9	93	90	91.5
1811	981,450	948,247	96.6	90	86	88
1812	715,098	667,999	93.4	85	80	82.5
1813	351,175	237,348	52.0	71	65	.68
1814	107,928	59,626	55.3	58	51	54.5
1815	917,227	700,500	76.4	77	71	74

[1]Seybert, *Statistical Annals*, 318; Pitkin, *A Statistical View*, 363.
[2]Soley, "Maritime Industries of America," in Shaler, *The United States of America*, I. 522, 527, 534, 536.
[3]For period from July 20 to end of calendar year 1789.

The increase in the gross tonnage of the American deep-sea fleet during the first four years following the adoption of shipping protection was not as great as the statistics of table 45 would indicate, because the returns during those years were incomplete. The accounts given for the year 1789 are particularly incomplete in that they do not include the tonnage employed throughout the entire year. There was, however, a very substantial increase in the American tonnage employed in the foreign trade, and the growth continued rapidly, though irregu-

[1] *History of the People of the U. S.*, III, 225.

larly, after the European wars began. From 447,754 gross tons in 1793, when complete statistics were first recorded, it rapidly advanced to 1,089,876 tons in 1807. In 1789 only 23.6 per cent of the value of the foreign trade and 54.4 per cent of the volume of shipping were conducted in American ships; but by 1807 these proportions, indicating how practically all foreign vessels except those of England disappeared from American harbors, had risen to 92 and 92.7 per cent respectively. To the American of the present time, when 90 per cent of American foreign trade is conducted in foreign vessels, it seems incredible that the deep-sea tonnage of the American flag was greater in 1807 than it was in 1907, that the American marine engaged in the foreign trade in 1807 was three times as large as the coastwise marine; that over 90 per cent of the country's foreign trade was confined to American ships; and that America conducted a large share of the carrying trade of Europe. The maritime industry in Massachusetts, New York, Pennsylvania, and Maryland in 1807 had no precedent in the history of any nation; and before the war with England broke out in 1812, fourteen other States and Territories were represented in the tonnage register. Boston, New York City, Philadelphia, Baltimore, Charleston, Providence, and Portsmouth became famous for the large number of newly acquired sailing ships.

DECLINE OF FOREIGN TRADE AND SHIPPING, 1807 TO 1815.

The growth of foreign trade and shipping from 1790 to 1807 did not proceed uninterruptedly. American merchantmen until 1805 were exposed to attacks by the Barbary pirates. England had enacted countervailing duties and had closed her West India ports against American ships except at irregular intervals. France had begun to issue hostile decrees as early as May 1793, and England as early as June 1793, and under these decrees American vessels and merchandise were exposed to seizure. Indeed, had not Great Britain in 1795, under the Jay treaty, agreed to compensate American merchants to the extent of $10,000,000 for property illegally condemned, war with England might have occurred long before 1812. The depredations upon American ships by the French after 1796 culminated in several naval engagements, which resulted in the commercial treaty of 1800.

After the renewal of the European wars in 1803, and after the expiration of the commercial sections of Jay's treaty, Great Britain revived the old neutrality rule of 1756, according to which neutrals in time of war could not carry on any trade which they did not ordinarily carry on in times of peace. In 1805, the seizure of American ships and cargoes by British and French men-of-war became a source of great loss to American merchants and ship-owners. The Secretary of State estimated that from 1803 to 1807 as many as 528 American ships were seized by England and 389 by France. But in spite of these interruptions, the foreign trade and shipping of the United States continued to grow, the crest of the tide not being reached until 1807.

When, in 1806, England extended her paper blockade so as to include all the European ports from the Elbe to Brest, Napoleon issued his famous Berlin decree declaring English ports in a state of blockade. England counterstroked in 1807 with the Orders in Council declaring a blockade against the ports of France and all her allies and forbidding neutral vessels to trade there except after calling at a British port, paying duties, and obtaining an English permit; and in answer to this the Milan decree of Napoleon made all vessels which traded in England and which recognized the British decrees subject to seizure by French men-of-war. It became the avowed purpose of Napoleon to bring England to terms by absolutely destroying her commerce, and to make this policy effective he refused to recognize the neutrality of any commercial power. From the Orders in Council of 1807 until the war of 1812, England seized 389 American ships; and from the Berlin and Milan decrees until 1812, 352 were seized by France, 70 by the Danes, and 47 by the Neapolitans.

Congress, on the advice of the President, sought a peaceful remedy, but the nature of the measures taken was such that the foreign trade continued to recede from its maximum of 1807. The first means of retaliation was a non-intercourse act which was never effective. This was followed on December 22, 1807, by an embargo on all ships in American ports, and the embargo was enforced by the American Navy. Imports fell from a value of $138,500,000 in 1807 to $56,990,000 in 1808; and exports fell from $108,343,000 to $22,430,000. So universal was the discontent which prevailed among American commercial interests that after a life of but fourteen months the embargo was replaced by a non-intercourse act applicable only to the trade with Great Britain and France. There was a slight recovery of trade, but, attacked by foreign enemies and hampered by non-intercourse restrictions, it remained in a depressed condition. War with England finally broke out in 1812, and the foreign trade continued to decline, until in 1814 it all but ceased. (See table 44.)

England had interfered with American trade by her Orders in Council, enforced by seizure and condemnation of vessels and cargoes; she had virtually blockaded American ports with her men-of-war; had impressed American seamen; and had apparently incited uprisings among the Western Indians. France and the allies of France had also attacked American commerce, but the grievances against England seemed the greater. The American people were willing to face a temporary suspension of trade in order to insure permanent future improvement. The desired effects of the war with England were not noticeable until the next commercial era, and there was no trade recovery until after December 24, 1814, when the envoys of both nations signed the Treaty of Ghent. Peace had meanwhile returned to Europe, thereby removing most of the reasons which had induced the United States to declare war on England and causing the commerce of the world to return once more to the channels in which it had flowed prior to 1793.

CHAPTER XXIV.

THE FOREIGN TRADE FROM THE TREATY OF GHENT TO THE CIVIL WAR.

The abnormal advance from 1815 to 1818, 31. Causes for the enlarged exports, 33. Reasons for the increase in imports, 35. Twelve years of trade recession, 1819–1830, 37. Causes of the stagnation in the export trade, 1819–1830, 38. Six years of improvement, 1831–1836, 41. Localities affected by growth in foreign trade, 43. A decade of irregular foreign trade, 1837–1846, 44. Fourteen years of buoyant foreign trade, 1847–1860, 46. Value of imports and exports, 1846–1860, 48. Destination of exports, 50. Revival of the foreign carrying trade, 51. Summary and conclusion, 51.

The forty-five years from the close of the second war with England to the outbreak of the Civil War were for the foreign trade of the United States a period of transition. The industries of the country were seeking a solid basis, its transportation problems were being solved, its commercial policy was being shaped. Meanwhile the foreign trade experienced great fluctuations. There were years of advance and recession, of buoyancy and dullness, but each advance reached a higher level than had previously been attained, and each depression was less severe than those preceding. The country was in every way becoming larger and its trade, domestic as well as foreign, rested on a gradually widening base. The export trade for the period 1836–1846, for instance, was relatively dull, but its lowest figure ($84,346,000 in 1843) was not far below those for the years 1816 to 1818, when trade was active. An export trade of $93,281,000, regarded as abnormally large in 1818, would, thirty-five years later, have been evidence of commercial stagnation, for in 1853 the shipments to foreign markets aggregated but little less than $203,500,000.

The foreign trade from 1815 to 1860, taken as a whole, may be conveniently divided into the following periods, alternately of advance and reaction: (1) the abnormal advance from 1815 to 1818; (2) twelve years of trade recession (1819 to 1830); (3) six years of improvement (1831 to 1836); (4) a decade of irregular foreign trade (1837 to 1846); and (5) fourteen years of growth and expansion (1847 to 1860).

THE ABNORMAL ADVANCE FROM 1815 TO 1818.

The conflict with England, which began in 1812, had not proceeded far when the statesmen of both countries saw that it must soon run its course, inasmuch as the conditions which had led to the declaration of war had ceased to exist. Since the conflict between England and her European enemies had ended, there was no further need to question the neutrality rights of the United States, to seize and condemn American vessels and cargoes, to blockade American harbors with men-of-

war, nor to impress American seamen. The conclusion of the European wars, moreover, made it difficult for the United States to obtain all that was originally requested by the American peace envoys. Though at first insisting upon definite stipulations concerning the right of impressment, President Madison finally instructed the American negotiators that "on mature consideration it has been decided, that [in view of] all circumstances above alluded to, incident to a prosecution of the war, you may omit any stipulation on the subject of impressment, if found necessary to terminate it."[1]

TABLE 46.—*Value of exports and imports of the United States, 1815 to 1818.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports retained for consumption.	Total imports.
1814	$6,782,000	$145,000	$6,927,000	$12,820,000	$12,965,000
1815	45,974,000	6,583,000	52,557,000	106,458,000	113,041,000
1816	64,782,000	17,138,000	81,920,000	129,964,000	147,103,000
1817	68,314,000	19,358,000	87,672,000	79,892,000	99,250,000
1818	73,854,000	19,427,000	93,281,000	102,323,000	121,750,000

The Treaty of Ghent contained no great commercial guarantees, either as regards impressment or otherwise. But though resulting in no definite treaty stipulations with respect to the important questions over which the conflict had been waged, the war nevertheless had certain permanent effects of extreme political and economic significance. First of all, it showed to the rest of the world that the United States was not only determined to insist upon her international rights, but was able to protect them. Secondly, the fact that for three years the country was shut off from the outside world and thrown upon its own resources worked a profound change in the character of domestic industry and trade, and at the same time brought the people to a sudden realization of the weakness of their former economic conditions. Internal (domestic) trade between the North and South, the East and West, became necessary in order that the people might live, and the lack of internal transportation facilities was impressed upon the public mind; while for the first time the extensive establishment of manufacturing industries became both requisite and, with foreign competition gone, readily possible.[2] The war afforded as complete protection to the infant industries of the country as did the high protective tariffs of later years.

Though the ultimate effects of the war with England were its wholesome influence upon the opinion of the European powers concerning the United States and its stimulus to American manufactures, the immediate effect of its termination was a temporary rise in the export and import trade.

From less than $7,000,000 in 1814, the volume of American exports rose to over $52,500,000 in 1815 and to $93,281,000 in 1818. The

[1]See Pitkin, *A Statistical View of the United States of America*, 406. [2]See vol. I, chap. xiii.

total volume of exports was less than during some of the years prior to the war, but the value of domestic exports, as distinct from the re-exports of foreign products, rose to a higher level than had ever before been attained, their highest previous point having been $48,700,000 in 1807. The return of peace to Europe effectively destroyed the remarkable reexport trade which had enriched American merchants during the Napoleonic conflicts. European trade returned to its usual channels—it again became largely a direct trade between producing and consuming countries and was conducted mainly in European vessels.

The unusual activity in the exportation of domestic commodities, which began shortly after peace was declared, was due to various circumstances:

(1) It was largely due to the sudden sale of accumulated commodities. Shipments to foreign markets during the war with England had been infrequent, although production had continued. Great stores of surplus cotton, flour, grain, tobacco, rice, provisions, and lumber, the products of two harvests, had remained unmarketed. For months prior to the declaration of peace, the large ports of New York, Boston, Philadelphia, Baltimore, New Orleans, Savannah, and Charleston were the scenes of active preparation for the resumption of foreign trade and shipping. Vessels were repaired and loaded, and wharves were crowded with cargoes awaiting the opportunity to be shipped to Europe and the West Indies.

(2) Since England and the Continent had been largely deprived of American products during the war, there was clamor abroad for a resumption of trade. The cotton mills of England had suffered from a lack of raw cotton, and for a short time they afforded an abnormally large market for the American staple.

(3) It became manifest that the war had scarcely touched the resources of the country, but that it had revealed the economic possibilities of America. There was energetic activity in agriculture and domestic trade, and the return of peace was the beginning of a period of prosperity in all lines of business except in the manufacturing industries that had been established during the war. Unfortunately, however, men set themselves too rapid a pace and the excessive activity soon resulted in commercial and industrial disaster.

In those days news traveled slowly, and even after the war was officially ended the long-idle merchant ships were forced to wait until the vessel carrying the messages announcing the signing of the treaty made the voyage across the Atlantic. But as soon as it became known that peace had been declared and that the European, West Indian, and British trade could be resumed, every available American vessel cleared port. Domestic exports to England during 1818, when this trade was at its height, reached a value of nearly $31,000,000, and those to France $8,700,000. Indeed, the shipments of domestic commodities to Eng-

land and France were chiefly responsible for the unusual revival of the export trade. Germany, Holland, Spain, the West Indies, Portugal, South America, the East Indies, and China took greater quantities of American goods than during the war of 1812, but less than they had taken during the years 1793 to 1807.[1]

It was mainly the agricultural products, which had been piled up at the ports during the war, that now found a market abroad. An aggregate of $62,897,000 in value of farm products, chiefly cotton, flour and wheat, tobacco, rice, provisions, and Indian corn, were exported in 1818. One-half of the total ($31,334,000) consisted of cotton, which had far outstripped flour and wheat ($12,463,000) as an article of export. Exports of forest products were valued at nearly $5,700,000 in 1818 and at nearly $7,300,000 in 1816. Sea products valued at $2,187,000 and manufactures valued at $4,439,000 were shipped abroad in 1818.

The nature of the domestic exports and the decline of foreign reexports caused striking changes in the relative positions in the export trade of the various States and seaports. New York still led, but its exports, foreign as well as domestic, were less than they had been during the European wars. All other North Atlantic States were now exceeded by Louisiana. Massachusetts was third, but only 37 per cent of the exports from Boston consisted of domestic products. Cotton exports placed South Carolina and Georgia respectively fourth and fifth, and then followed Pennsylvania, Maryland, and Virginia. The shipment of foreign goods reexported centered at the North Atlantic ports, while the rise of cotton exports and the partial occupation of the Mississippi Valley gave a surprising impetus to the shipment of domestic exports from New Orleans, Charleston, and Savannah.

The exports in 1818, as compiled by Pitkin, are shown in table 47.

TABLE 47.—*Value of exports from certain States, 1818.*

State.	Domestic exports.	Total exports.	State.	Domestic exports.	Total exports.
New York	$12,982,000	$17,872,000	Massachusetts	$5,698,000	$11,988,000
Louisiana	12,176,000	12,924,000	Pennsylvania	5,045,000	8,759,000
South Carolina	11,184,000	11,440,000	Maryland	4,945,000	7,570,000
Georgia	10,977,000	11,132,000	Virginia	6,941,000	7,016,000

Coincident with the sudden rise in the exports of domestic products, there was an inrush of imports from England, and to a less extent from the Continent, India, and the West Indies. The value of all imported commodities soared from less than $13,000,000 in 1814 to $113,041,000 in 1815, $147,103,000 in 1816, and $121,750,000 in 1818. The value of

[1] Evans, *Domestic Exports, 1789–1883*, pp. 78–95.

imported products retained for consumption likewise reached a maximum of nearly $130,000,000 in 1816, and in 1818 was officially stated as $102,323,000. (See table 46.) As compared with the export trade, the growth in imports was much larger. In 1816, when the influx of foreign goods was at its height, they exceeded the previous maximum annual value of imports by $11,000,000 and were double the total exports of domestic commodities.

The reasons for the sudden increase of imports were much like those which caused the great expansion of domestic exports:

During the war, the merchants and manufacturers of England and Europe piled up cargoes of unmarketed goods, awaiting the resumption of the American trade. The merchants of England, in particular, were eager for the reopening of the American markets, because after the close of the European wars heavy restrictions were placed upon the importation of British goods into the continental countries.

For a time American merchants and consumers, even though domestic manufactures of many kinds were available, welcomed the arrival of foreign goods.

It was decidedly to the advantage of British manufacturers to crush the numerous manufacturing industries which had arisen in the United States during the war of 1812. As stated at the time by a member of Parliament, "it was well worth while to incur a loss upon the first exportation, in order by the glut, to stifle in the cradle, those rising manufactures in the United States, which the war had forced into existence, contrary to the natural course of things."

The British manufactures, which comprised the bulk of the imports, soon glutted the American market, to the serious detriment of the many industries which had not as yet been so firmly established as to withstand sharp competition. Before long, prices fell so low that from the eastern seaports to Cincinnati, Pittsburgh, and Nashville in the West, men were thrown out of work by the closing of factories.[1] Cotton, woolen, silk, flax, iron, lead, tin, brass, and copper manufactures, glass and earthen ware, haberdashery, hats, and other English goods were sold at low prices in auction sales; cheap India cottons came in large bulks; silks, cotton goods, wine, and brandy came from southern Europe and France; woolen, linen, iron, lead, and glass manufactures, spirits, cheese, and paints from northern Europe; sugar, rum and molasses from the West Indies.

The very magnitude of the import trade led to the adoption of measures to check it, *i. e.*, to the first concerted move for protection. The manufacturers of the Middle Atlantic and Central States were joined by the sugar and cotton interests of the South and the farmers of the West in a movement to curb the rising tide of importations by imposing a system of high duties on foreign products. The merchants and ship-

[1] Fearson, *Sketch of America*, 417.

owners of New England, fearing its effect upon their foreign trade and shipping, opposed protection, but a tariff law was enacted in 1816, extending moderate protection to the cotton, woolen, and iron industries. The only effective provisions of this act were those against the low-priced India cottons, which were given a minimum valuation of 25 cents and were consequently obliged to pay an import duty two or three times that imposed by the former tariff laws. Aside from these provisions, the general rates were so low, and were so frequently circumvented by means of false sales and invoices,[1] that British manufactures continued to glut the American market. Even when a new tariff law was enacted in 1818 there was no effective protection. The continued influx of foreign goods, however, greatly strengthened the cause of protection.

Meanwhile, Congress was breaking down the old policy of protection to shipping which had been in force since 1789. By an act of 1815, the President was authorized to apply the policy of shipping reciprocity to the direct trade with any country granting equal privileges to American ships and cargoes. In July of that year a commercial treaty with England was concluded and the provisions of the treaty of 1794 regarding trade with British India were readopted. It was agreed that in the direct trade between Great Britain and the United States neither country should levy discriminating duties against the ships or commodities of the other, but that the West India trade might be regulated as either nation desired. The first of these provisions greatly injured the position in the carrying trade previously enjoyed by American vessels in the heavy direct trade with England, and the other provision was so interpreted as to cripple the American shipping and export trade with the British West Indies. Shipments of American flour, provisions, corn, rice, lumber, and live-stock to those islands were limited, and American vessels were debarred. English vessels secured the profits of a lucrative triangular trade in which they brought cargoes of English wares to the United States, carried thence American flour or lumber to the British West Indies, and then took cargoes of West India sugar, rum, and molasses back to the United States to exchange for American cotton, or proceeded to England with their cargoes from the West Indies.

The growth of both the import and export trade was abnormal and led to a commercial reaction. Even had there been no other disturbing influence, it is probable that the panic which began in October 1818 would have occurred; for in those days the dependence of the country upon foreign trade was far greater than it was after its own manufacturing industries, together with a large domestic market, had been developed. But other disturbing influences were effective. As the great excess of imports over exports was constantly draining specie out

[1]McMaster. *History of the People of the U. S.*, IV, 341.

of the United States, large amounts of paper money were issued to replace it, and with the depreciation of this paper currency and the consequent inflation of prices, still more specie was driven out of the country. When in 1817 the evils of unwise paper issues became manifest, there was a reversal of policy, whereby the bank circulation was suddenly restricted to much smaller limits. However, the sudden contraction only disturbed matters still more. There was, moreover, a speculative mania which led to over-extension in all lines of business, except in the recently established manufacturing industries, which were ruined by the flood of foreign products. Finally, in the latter months of the year 1818, when the reaction came in foreign trade, a general business, banking, and currency panic ensued, and the active foreign commerce of the previous three years came to a sudden end.

TWELVE YEARS OF TRADE RECESSION, 1819 TO 1830.

A sharp decline in the foreign trade accompanied the panic of 1818–19, the effects of which lasted for a long time. Imports dropped from a value of $121,750,000 in 1818 to $87,125,000 in the following year, and exports of domestic products fell from $73,854,000 to $50,977,000 during the trade year. It was the beginning of twelve years of dull foreign commerce. In 1830 the imports were valued at less than $71,000,000, the exports of domestic goods at $59,462,000, and the total export trade at $73,849,000. The reexport trade continued the downward tendency which began with the close of the European wars, so that the total export trade in 1830 had a smaller value than the domestic products which had been shipped abroad in 1818. The decline in value was partly due to the lower level of prices; but except in the cotton exports there was also a decrease in the volume of the foreign trade.

Dullness was especially pronounced in the import trade. While in 1815 the value of imports had exceeded the value of exports by $60,000,000, the excess was now a small item; indeed, during four of the twelve years the exports were in excess of the imports. There was a slight increase in the imports received from Spain, Norway, and Sweden, the Hanse Towns, Manila, China, Brazil, and the Argentine, but France alone, of the commercial countries which shipped large quantities of foreign goods to America, continued to increase the volume of her shipments. The imports received from England, Holland, the West Indies, Russia, Portugal, and British India fell off; and those from the Dutch East Indies remained about stationary.

The import trade of every large Atlantic port except New York was depressed. The quantity of goods received at New York increased after 1825, when the Erie Canal provided a direct connection between that port and the Central West; but the improvement at New York did not end the general stagnation of the import trade of the country as a

whole. It merely shifted a still larger share of the trade to New York, increasing the dullness at Philadelphia, Boston, Baltimore, Charleston, and Savannah. The import trade at New Orleans and Mobile gradually increased, for those ports served a large new country which was without adequate eastern transportation connections. But the imports received at the Gulf ports were small as compared with the exports handled by them and small as compared with the imports received at New York, Boston, and Philadelphia. The decrease in trade occurred with respect to practically all the important articles imported—woolen and cotton goods, linen and silks, spirits, tea, lead, sugar, and molasses. There were but few imports which were not seriously retarded. In manufactures there was an increase in iron imports; wines, fruits, spices, and coffee were also more largely imported; and a few raw materials for the manufacturing industries, chiefly tropical cabinet woods, indigo, hides and skins, copper, tin, and brass were bought in slightly larger quantities.

TABLE 48.—*Value of exports and imports of the United States, 1819 to 1830.*[1]

Year.	Exports domestic products.	Exports foreign products.	Total exports.	Imports.
1819	$50,977,000	$19,166,000	$70,143,000	$87,125,000
1822	49,874,000	22,286,000	72,160,000	83,242,000
1825	66,945,000	32,591,000	99,536,000	96,340,000
1827	58,922,000	23,403,000	82,325,000	88,509,000
1830	59,462,000	14,387,000	73,849,000	70,877,000

While the export trade in American commodities did not increase much during the years 1819 to 1830 and remained below the high level of 1818, it is significant that it consistently remained at a higher level than it had occupied prior to the war of 1812. Domestic exports to the East Indies, the Swedish and Danish West Indies, Cuba, and Spain continued as they had before the panic; those to France, Canada, Norway and Sweden, Italy, and Brazil increased slightly. The export trade suffered chiefly in England and the British West Indies. Shipments to the British West Indies almost ceased, and those to the Dutch, French, and Spanish West Indies (except Cuba), Holland, Russia, the Hanse Towns, Portugal, and China were far less than they had been either before or immediately after the conflict with England.

The dullness affected most of the great articles of export—flour and wheat, corn, tobacco, fish, lumber, naval stores, and provisions. There were but two important exceptions, cotton and manufactures. Cotton culture had by 1830 been extended throughout all the South Atlantic States; and the Gulf States (Alabama, Mississippi, and Louisiana), together with Tennessee, produced nearly one-half the entire crop. Of the increased crop, but 60,000,000 to 70,000,000 pounds were consumed in American mills. The foreign cotton market was far more important

[1] Pitkin, *A Statistical View*, 35, 177.

than the domestic market, and cotton exports advanced from 87,000,000 pounds in 1819 to 298,000,000 in 1830. It was only because of the violent fall in prices that the value of these cotton exports grew but slightly.[1] The advance in exports of manufactures was due to an unusual increase in the output of cotton textiles, boots and shoes, soap, candles, hats, wood manufactures, and iron goods. The value of exported manufactures increased from $2,000,000 in 1819 to nearly $6,000,000 in 1830.[2]

The stagnation in the export trade was greatest in the Atlantic States, and nowhere else was trade crippled so severely as in Pennsylvania. A short time before, this State had led in the foreign trade, but in 1830 her exports were valued at only $4,292,000, or less than those of any other important commercial State except Maryland. The depression in New England was only slightly less acute than in Pennsylvania. New York alone of all the Atlantic States increased the annual shipments to foreign markets, chiefly because the port of New York had after 1825 a direct canal route to the interior. In contrast with the reaction in the East, the foreign trade dependent upon the Mississippi River and the port of New Orleans slowly advanced. By 1830, New Orleans was second only to New York in the export trade; its exports were double those of Boston and more than treble those of Philadelphia. The trade of Mobile, dependent largely upon the Alabama River, was still relatively small, but was likewise gradually increasing.

The values of exports in 1819 and 1830 from certain States, as stated by Pitkin, were as follows:

TABLE 49.—*Value of exports from certain States, 1819 and 1830.*

	1819	1830		1819	1830
New York	$13,587,000	$19,698,000	Virginia	$4,392,000	$4,792,000
Louisiana	9,769,000	15,489,000	Pennsylvania	6,294,000	4,292,000
South Carolina	8,251,000	7,627,000	Maryland	5,926,000	3,791,000
Massachusetts	11,399,000	7,213,000	Alabama	....	2,295,000
Georgia	6,310,000	5,337,000			

Though the violent depression of the foreign trade was due first to the panic of 1818–19, there were other reasons why foreign commerce remained in a continuous state of stagnation for a dozen years or more:

A larger domestic commerce developed. It is significant that the depression in general business and in the internal trade of the country was less severe; indeed, by the middle of the period from 1819 to 1830, many branches of internal commerce were in a flourishing condition.[3] A determined effort was being made to develop home industries and a domestic market for the agricultural crops, and with these purposes in view the farmers of the West and the manufacturers of

[1] Value of cotton exports: 1818, $31,334,000; 1819, $21,082,000; 1825, $36,847,000; 1830, $29,675,000.

[2] As compiled by Evans, *Domestic Exports, 1789–1883*, p. 70.

[3] See vol. I, chap. xiii, pp. 217–218.

whole. It merely shifted a still larger share of the trade to New York, increasing the dullness at Philadelphia, Boston, Baltimore, Charleston, and Savannah. The import trade at New Orleans and Mobile gradually increased, for those ports served a large new country which was without adequate eastern transportation connections. But the imports received at the Gulf ports were small as compared with the exports handled by them and small as compared with the imports received at New York, Boston, and Philadelphia. The decrease in trade occurred with respect to practically all the important articles imported—woolen and cotton goods, linen and silks, spirits, tea, lead, sugar, and molasses. There were but few imports which were not seriously retarded. In manufactures there was an increase in iron imports; wines, fruits, spices, and coffee were also more largely imported; and a few raw materials for the manufacturing industries, chiefly tropical cabinet woods, indigo, hides and skins, copper, tin, and brass were bought in slightly larger quantities.

TABLE 48.—*Value of exports and imports of the United States, 1819 to 1830.*[1]

Year.	Exports domestic products.	Exports foreign products.	Total exports.	Imports.
1819	$50,977,000	$19,166,000	$70,143,000	$87,125,000
1822	49,874,000	22,286,000	72,160,000	83,242,000
1825	66,945,000	32,591,000	99,536,000	96,340,000
1827	58,922,000	23,403,000	82,325,000	88,509,000
1830	59,462,000	14,387,000	73,849,000	70,877,000

While the export trade in American commodities did not increase much during the years 1819 to 1830 and remained below the high level of 1818, it is significant that it consistently remained at a higher level than it had occupied prior to the war of 1812. Domestic exports to the East Indies, the Swedish and Danish West Indies, Cuba, and Spain continued as they had before the panic; those to France, Canada, Norway and Sweden, Italy, and Brazil increased slightly. The export trade suffered chiefly in England and the British West Indies. Shipments to the British West Indies almost ceased, and those to the Dutch, French, and Spanish West Indies (except Cuba), Holland, Russia, the Hanse Towns, Portugal, and China were far less than they had been either before or immediately after the conflict with England.

The dullness affected most of the great articles of export—flour and wheat, corn, tobacco, fish, lumber, naval stores, and provisions. There were but two important exceptions, cotton and manufactures. Cotton culture had by 1830 been extended throughout all the South Atlantic States; and the Gulf States (Alabama, Mississippi, and Louisiana), together with Tennessee, produced nearly one-half the entire crop. Of the increased crop, but 60,000,000 to 70,000,000 pounds were consumed in American mills. The foreign cotton market was far more important

[1] Pitkin, *A Statistical View*, 35, 177.

than the domestic market, and cotton exports advanced from 87,000,000 pounds in 1819 to 298,000,000 in 1830. It was only because of the violent fall in prices that the value of these cotton exports grew but slightly.[1] The advance in exports of manufactures was due to an unusual increase in the output of cotton textiles, boots and shoes, soap, candles, hats, wood manufactures, and iron goods. The value of exported manufactures increased from $2,000,000 in 1819 to nearly $6,000,000 in 1830.[2]

The stagnation in the export trade was greatest in the Atlantic States, and nowhere else was trade crippled so severely as in Pennsylvania. A short time before, this State had led in the foreign trade, but in 1830 her exports were valued at only $4,292,000, or less than those of any other important commercial State except Maryland. The depression in New England was only slightly less acute than in Pennsylvania. New York alone of all the Atlantic States increased the annual shipments to foreign markets, chiefly because the port of New York had after 1825 a direct canal route to the interior. In contrast with the reaction in the East, the foreign trade dependent upon the Mississippi River and the port of New Orleans slowly advanced. By 1830, New Orleans was second only to New York in the export trade; its exports were double those of Boston and more than treble those of Philadelphia. The trade of Mobile, dependent largely upon the Alabama River, was still relatively small, but was likewise gradually increasing.

The values of exports in 1819 and 1830 from certain States, as stated by Pitkin, were as follows:

TABLE 49.—*Value of exports from certain States, 1819 and 1830.*

	1819	1830		1819	1830
New York	$13,587,000	$19,698,000	Virginia	$4,392,000	$4,792,000
Louisiana	9,769,000	15,489,000	Pennsylvania	6,294,000	4,292,000
South Carolina	8,251,000	7,627,000	Maryland	5,926,000	3,791,000
Massachusetts	11,399,000	7,213,000	Alabama	....	2,295,000
Georgia	6,310,000	5,337,000			

Though the violent depression of the foreign trade was due first to the panic of 1818–19, there were other reasons why foreign commerce remained in a continuous state of stagnation for a dozen years or more:

A larger domestic commerce developed. It is significant that the depression in general business and in the internal trade of the country was less severe; indeed, by the middle of the period from 1819 to 1830, many branches of internal commerce were in a flourishing condition.[3] A determined effort was being made to develop home industries and a domestic market for the agricultural crops, and with these purposes in view the farmers of the West and the manufacturers of

[1]Value of cotton exports: 1818, $31,334,000; 1819, $21,082,000; 1825, $36,847,000; 1830, $29,675,000.

[2]As compiled by Evans, *Domestic Exports, 1789–1883*, p. 70.

[3]See vol. I, chap. xiii, pp. 217–218.

the East and West united in favoring a policy of higher protection to American manufactures. New England and the South changed positions, the former embracing the cause of protection and the latter deserting it. The South had few industries to protect and few commodities which might depend on a home market, the bulk of its one great crop (cotton) being sold abroad and the greater portion of the many manufactured articles annually required being purchased abroad or in the North. Notwithstanding the opposition of the South, the manufacturers and the farmers carried out their program, and under the stimulating influence of the new policy industry quickly revived and the people became prosperous, while a notable domestic trade arose to compensate for the losses in foreign commerce. Professor McMaster writes that "it is useless to attempt a summary. It is sufficient to know that from Maine to Maryland and from Maryland to Missouri new industries of a hundred sorts were now pursued with untiring energy."[1] The growth of home industries tended to decrease both the import and export trade. Raw materials for manufacturing found a larger home market than formerly at American mills and factories, and the growth of industrial centers and city population provided a larger domestic market for American flour, wheat, corn, fish, and provisions.

The American protective tariff wall gradually being erected was a hindrance to the importation of foreign manufactures. That was the immediate purpose of the protective tariff acts of 1818, 1819, 1824, and 1828, each of which increased the rates of import duties.

England and most other powers of Europe were similarly enacting tariff laws which limited the foreign market for American exports. The English corn laws and continental tariffs were strictly enforced against American agricultural products and foodstuffs. Even the cotton export trade, which grew rapidly during these years, suffered not only from reduced prices, but from the British policy of discrimination in favor of cotton from British possessions, which was inaugurated in 1819.

Aside from the legislative restrictions, the European demand for American agricultural products and lumber had, since the return of peace in Europe, fallen back to a normal level. The great increase in exports to Europe during the European wars was by its very nature temporary, and the rebound after the war with England was but natural. Europe had now definitely returned to old trade channels, and with the return came a falling off in the demand for American products.

The lack of cheap and adequate transportation facilities between the interior and the seaports still remained a powerful obstacle to the ready movement of imports and exports. What the transportation

[1] *A History of the People of the U. S.*, V. 230.

situation was during these years and how it was slowly being improved by the building of canals and turnpikes, the extensive use of flat-boats, and the introduction of river steamboats is described in connection with the account of the development of internal commerce.[1]

SIX YEARS OF IMPROVEMENT, 1831 TO 1836.

After 1830 the trade situation became somewhat more favorable to an increase in imports and exports. In 1832 the tariff, although still left high enough to protect cotton, woolen, and iron manufactures, was in some respects reduced; and the compromise tariff act of the following year provided for a gradual reduction throughout the entire list of protected industries. The long-standing controversy with Great Britain over the West India trade was settled in 1830, British and American vessels thereafter engaging in this trade on terms of equality. The principle of shipping reciprocity, which had been applied to the direct trade with foreign countries in 1815, was in 1828 extended to the indirect trade as well. Reciprocal shipping arrangements were accordingly entered into with Norway and Sweden, Brazil, Martinique, and Guadeloupe in 1828; with Prussia in 1829; Great Britain and Canada in 1830; Austria-Hungary in 1831; Spain, Mexico, and Russia in 1832; Mecklenburg-Schwerin in 1834; and with Portugal, Madeira, Porto Santos, the Azores, Tuscany, and Venezuela in 1836. Many general commerce and navigation treaties were concluded during these six years and the years immediately preceding.[2]

The development of the agricultural industries of the Central States and the Southwest was gradually resulting in the production of a large annual surplus of farm products. Large quantities of pork and beef products, butter, flour, corn, whisky, and hemp were shipped down the Mississippi River, together with cargoes of staves, bagging and cordage, candles, and other rough manufactures. Simultaneously, growing quantities of western products were moving eastward by way of the Erie Canal route. The growth of cotton culture in the Southwest was of even greater importance to the foreign trade. The total crop grew from 979,000 bales in 1830 to 1,423,000 in 1837, and nearly the entire increase was in the new cotton States of the Southwest.[3] Southern agriculture was becoming highly specialized, the one great crop being cotton. Specialization requires exchange of commodities, and at this time its chief influence was on the foreign trade, for although the northern cotton mills were heavy buyers, three-fourths of the total cotton crop was obliged to seek a foreign market. Fortunately, a stronger demand in England had arisen, both because of the rapid

---

[1] See vol. I, chap. xiii, pp. 213, 220.

[2] See *Treaties, Conventions*, etc., *Between the United States of America and Other Powers, 1776-1909*. Senate Doc. No. 357, 61 Cong., 2 sess.

[3] Hammond, *The Cotton Industry*, 72.

expansion of the British cotton-textile industry and of a decrease in the purchases of West India and Brazilian cotton.[1] The specialization in cotton culture required the South to purchase many commodities. A lucrative trade between the North and South sprang up, and the imports into the South from abroad were also largely increased.

Domestic and foreign trade were stimulated by improvements in the means of transportation. The Erie Canal, opened in 1825, was a pronounced success; the Ohio River, in 1832, was connected with Lake Erie by the Ohio Canal; over 300 steamboats and a large number of flatboats were navigating the Mississippi and other western rivers. Canals were opened between Lake Champlain and the Hudson River, between the Chesapeake and Delaware Bays, between the interior of Pennsylvania and the seaboard, and in many other sections of the country. By the end of this period, 12 States had contracted an aggregate canal debt of over $60,000,000, and although some of the funds were unwisely spent, in many instances the new waterways were highly successful.

The advance which began in 1831 and ended in 1837 carried the foreign trade to a higher level than it had reached during the abnormal rise of the years 1815 to 1818. The exports of domestic merchandise rose from $59,462,000 in 1830 to nearly $107,000,000 in 1836, or to a point over $33,000,000 in excess of the previous maximum of the year 1818. Though the re-exportation of foreign products was now of slight importance, the annual value of the entire export trade was $20,000,000 in excess of what it had been in any year of the past history of American commerce.

TABLE 50.—*Value of exports and imports of the United States, 1830 to 1836.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports.
1830	$59,462,000	$14,387,000	$73,849,000	$70,877,000
1831	61,277,000	20,033,000	81,310,000	103,191,000
1832	63,137,000	24,040,000	87,177,000	101,029,000
1833	70,317,000	19,823,000	90,140,000	108,118,000
1834	81,034,000	23,313,000	104,347,000	126,521,000
1835	101,189,000	20,505,000	121,694,000	149,896,000
1836	106,917,000	21,746,000	128,663,000	189,980,000

The increase in exports was general in all the North and South Atlantic States except Pennsylvania and Maryland. The general exports of New York and the cotton exports of Charleston and Savannah were unusually large. Relatively, even greater progress was made at the Gulf ports, and by 1834 the cotton of the Southwest, combined with the western commodities carried down the Mississippi River, made New Orleans the leading exporting city of the United

[1] Hammond, *The Cotton Industry*, 248.

States. From a value of $15,000,000 in 1830, the exports from Louisiana rose to $37,000,000 in 1836, while the exports from New York in the latter year amounted in value to only $29,000,000. The foreign shipments from Mobile during the same years advanced from $2,295,000 to $11,184,000, their value being greater than that of the exports of any Atlantic port except New York and Charleston.

The increase was not general as to all the exports of the country, but it included some of the leading articles of commerce. Unusual increases were made in tobacco and cotton exports, the value of the cotton rising from $29,674,000 in 1830 to $71,285,000. Smaller gains were made in the foreign shipments of flour, provisions, whale oil, naval stores, staves and lumber, and manufactures.

The nature of the articles which caused the enlarged exports confined the growth of trade mainly to the markets of England and northern Europe. Shipments to Great Britain increased from $28,841,000 in 1831 to $53,302,000 in 1836, and those to France rose from $5,635,000 to $19,608,000. Smaller but increasing quantities were shipped to Scotland, the Hanse Towns, Belgium, Russia, Norway and Sweden, Spain, and Denmark. The shipments to Italy and Portugal declined, and outside of northern Europe and Great Britain there was little increase in American exports except to Canada and the British West and East Indies. This was not an era of expanding trade in the newer markets of the world. The exports to China, to Manila, the Dutch East Indies, Mexico, and Central and South America, continued at their general level of the previous period, 1818 to 1830. The shipments to the Spanish, Dutch, and Danish West Indies likewise did not increase, and those to the French West Indies suffered a decline.

The growth in exports was accompanied by an even greater and more general increase in the import trade. Its value rose sharply from $70,879,000 in 1830 to $189,980,000 in 1836. The largest quantities of foreign goods came from Great Britain, France, and the countries of northern Europe, where the surplus cotton crop of the United States found a market. From all the countries in which the American export trade increased, as well as from China, Mexico, Cuba, Brazil, Peru, and Colombia, there came a growing volume of imports.

The expanding import trade centered mainly at the ports of the North Atlantic. At all the large North Atlantic ports, even at Philadelphia, where the export trade was inactive, the import trade gradually increased. Imports entering the State of New York grew in value from $35,624,000 in 1830 to $118,253,000 in 1836, comprising 62 per cent of the total imports of the entire country. From New York City, Boston, and Philadelphia the foreign goods were distributed throughout the United States. The imports moving directly to the South Atlantic ports from abroad also increased, but they were trivial in quantity and value as compared with their cotton exports. The

imports entering New Orleans, the leading export center, likewise advanced, but they were less than one-half the exports from that city and very much less than the import trade of either New York or Boston. Alabama, with an export trade valued at $11,184,000, imported directly foreign goods valued at but $651,000; while Pennsylvania, with exports of less than $4,000,000, received imports valued at over $15,000,000.

It does not follow that the Southern States consumed few imports. On the contrary, the business of the South being highly specialized, it was necessary to make heavy purchases from the North, of foreign as well as of domestic commodities. Instead of importing directly from abroad, the South was wont to receive many foreign goods indirectly from northern merchants. A well-known contemporary southern publisher and writer described as follows this indirect trade, which continued for many years:

"The fact is forced upon us, that the South, though furnishing the great aggregate of the exports of the country, has declined in the relative importance of its foreign commerce. . . . The question then presents itself, will the South be content with its present position? If a great centralization of capital at the North be the secret of its vast commerce, have not we to balance against it many other advantages? We are as near to Europe, nearer to the West Indies, to South America, to Mexico, and other important trading points. Thousands of shipping leave our ports with rich products annually, and they must return directly to us, in mere ballast, or take a circuitous course back by the way of New York or Boston. If there are any wares or merchandise to return, for our own consumption, for the cotton, tobacco, rice, sugar, or grain, sent by us to Europe, how natural and proper is it that these wares and merchandise should return *directly* here, without being saddled with the profits of intermediate hands. That the South should be *dependent* upon the North for its imports is inexplicable upon any sound principle of political economy, and evidences a state of things humiliating in the extreme. We do not want *capital*, but most sadly want *enterprise*, which God, we implore, will give to our children, should it so happen that we are irreclaimable and past all hope."[1]

A DECADE OF IRREGULAR FOREIGN TRADE, 1837 TO 1846.

The buoyancy of foreign trade was of short duration. The business prosperity of the country again developed a speculative fever which resulted in another serious financial and industrial panic. Western land speculation, promoted by unsound banking, was the chief field of over-extended credit. The number of banks increased from 329 in 1829 to 788 in 1837, bank circulation from $48,000,000 to $149,000,000, and bank loans from $137,000,000 to $525,000,000. When, in July 1836, the famous specie circular was issued, the farmer as well as the land speculator was unable to meet his obligations, and many banks suspended. Land speculation, moreover, was supplemented by over-extension in other lines of business. The investment of public as well

[1]DeBow, *The Industrial Resources of the Southern and Western States*, I. 330, 331.

as private funds in canals and other internal improvements went beyond the bounds of safety; private business of many kinds was generally over-extended; and the distribution of the Federal surplus increased the likelihood of reaction. Prices were raised to a speculative level, and as a climax to the unsound conditions prevailing, there was a crop failure in 1837.

The panic of 1837 was not the result of abnormal foreign trade, as the panic of 1818–19 to a large extent had been, but when the business reaction came, a setback in imports and exports occurred. In one year the value of the imports shrank nearly $49,000,000, and that of the exports over $11,000,000. It was several years before the effects of the panic were overcome, and even then there was nothing to stimulate the foreign trade. As is shown in table 51, the value of neither the import nor the export trade had at the end of a decade recovered the level occupied in 1836. The volume of the foreign trade, aside from cotton exports, remained almost stationary.

TABLE 51.—*Value of exports and imports of the United States, 1836 to 1846.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports.
1836	$106,917,000	$21,746,000	$128,663,000	$189,980,000
1837	95,564,000	21,855,000	117,419,000	140,989,000
1840	113,896,000	18,190,000	132,086,000	107,142,000
1845	99,300,000	15,347,000	114,647,000	117,255,000
1846	102,142,000	11,347,000	113,489,000	121,692,000

Aside from the increase in cotton culture, no positive forces to encourage the growth of foreign trade appeared until a full decade had elapsed. Though further improvement in the facilities for internal transportation was essential in order that western farm produce might move at lower cost, the canal policy was almost abandoned after the panic, and railroad construction was inactive until after 1846. The country was afflicted with a money stringency which retarded business investment. Public opinion once more favored a protective tariff, and the compromise act of 1833 was in 1842 replaced by a law imposing higher import duties, the immediate results of which were to reduce still further the import trade and create a larger home market for American commodities.

Aside from the expansion of the cotton crop, there was no marked increase in production during this decade, and consequently no need for an enlarged foreign market. The cotton planters, however, whose crop increased from 1,361,000 bales in 1836 to 2,100,000 in 1846 and 2,395,000 in the previous season, were sorely in need of markets. Though the value of the cotton exports declined from $71,284,000 in 1836 to $42,767,000 in 1846, their volume grew from 424,000,000 to 547,000,000 pounds. In 1845, as many as 873,000,000 pounds of cotton

were shipped abroad, but the value of these exports was less than $52,000,000. In the cotton trade, as distinct from other branches of the foreign trade, the dullness was due not to a decreased volume of foreign shipments, but to the low prices received for them.

The foreign trade as a whole was irregular, but neither gained nor lost any considerable ground. In value it declined; in aggregate volume it rose somewhat. The aggregate gross vessel tonnage entered and cleared in the foreign trade of the United States grew from 3,295,000 tons in 1836 to 6,300,000 in 1846. The value of the trade with the British West Indies, Canada, Russia, the Hanse Towns, Italy, and China continued slowly to increase. That with the leading European markets—Great Britain and France—underwent a heavy decline, as also did the trade with Scotland, Denmark, the East Indies, the Dutch and Danish West Indies, Argentina, and Colombia. The Mexican trade declined abruptly, for Mexico and the United States were preparing for the war which began in 1846. The trade with the remaining portions of the commercial world barely maintained the level which it had attained during the years 1831 to 1836.

FOURTEEN YEARS OF BUOYANT FOREIGN TRADE, 1847 TO 1860.

After 1846 a series of events occurred which resulted in the rise of the foreign trade to a new high level.

(1) An event of far-reaching importance was the discovery of gold in California in 1848. When the news of the discovery reached the Middle West and East, thousands of gold-hunters migrated in caravans across the plains and mountains, in sailing clippers around Cape Horn, and in steamers to and beyond Nicaragua and Panama. The Panama Railroad, which began operation in 1855, greatly increased the use of the Panama route. In 1851 gold was discovered in Australia, and in 1859 a gold stampede to Colorado began. The combined product of all the newly discovered gold mines increased the specie of the world sufficiently to raise the prices of commodities, to act as a powerful stimulus to production, and to enlarge the purchasing demand in this and other countries. For the time being, the money stringency, which had acted as a hindrance to production and commerce, was removed, and the country experienced an era of exceptional business prosperity.

Another cause of great influence was the rapid construction of railroads. Stimulated by the abundance of money, by general business prosperity, by the opening of the West, by public-land grants, stock subscriptions, and other forms of public aid,[1] and by the eagerness of the investing and speculative public to purchase securities, railroad construction advanced at a rapid rate and the railroad mileage of the country rose from 9,021 miles in 1850 to 30,635 in 1860. Not only were the leading trade centers of the East joined by rail, but most

[1] Johnson, *American Railway Transportation*, chaps. iii and xxii.

of the large eastern trunk lines were completed, and for the first time the Mississippi Valley was effectively connected with the Atlantic seaboard.[1] Although construction was less active in the South, a group of railroads was built to connect the South Atlantic ports with the interior, and another group extended northward from the Gulf ports. Effective means of communication were simultaneously established. The postal system was rapidly extended, and by 1860 most of the large cities were connected by a telegraph system aggregating 50,000 miles of line.

(3) The rapid opening of the Mississippi Valley was of primary importance to the foreign trade. The westward migration and the land speculation of earlier years were now resulting in the rapid development of agricultural resources. In 1838 Chicago, a small fur-trading station, made its first shipment of wheat, amounting to 78 bushels. No other grain, no flour, or provisions were then shipped from the future metropolis of the West, but in 1860 Chicago shipped 698,000 barrels of flour, 13,700,000 bushels of corn, and 12,402,000 bushels of wheat. Illinois, Indiana, Ohio, and Wisconsin outranked Pennsylvania and New York as grain-producing States, and promising beginnings were made in Michigan, in the trans-Mississippi States of Iowa, Missouri, and Minnesota, and in California and Oregon. The livestock and provision trade still centered mainly at Cincinnati and Louisville, but it had spread westward through Indiana, Illinois, and Missouri; and Chicago, Indianapolis, and St. Louis became shipping and packing centers. In 1850 Kentucky and Tennessee were the leading hog-raising States, but by 1860 they were superseded by Indiana, Illinois, and Missouri.

(4) The relatively prosperous decade and a half that preceded 1860 was an era of rapidly increasing agricultural production, compelling producers to seek foreign as well as home markets. The cotton crop, which even before 1846 had been so large as to embarrass the southern planters with declining prices, grew from 1,424,000 bales in 1837 to 3,841,000 in 1860. The wheat crop rose from 84,823,000 bushels in 1840 to 173,105,000 in 1860; the corn crop from 377,532,000 to 838,793,000 bushels; the number of hogs from 26,000,000 to 33,500,000; the number of beef cattle from 15,000,000 to nearly 25,500,000; and the tobacco crop grew from 219,000,000 to 434,000,000 pounds.

The manufacturing industries also increased their output. In 1860 the cotton mills consumed 423,000,000 pounds of cotton as compared with 126,000,000 in 1840; and during the same period the output of the woolen mills advanced from a value of $20,700,000 to $73,454,000. The official value of all the manufactures produced in the United States rose from $1,000,000,000 in 1850 to $1,886,000,000 in 1860. But the growth in home industries did not increase the domestic market suffi-

---

[1] See vol. I, chap. xiv, pp. 237–241.

ciently to counterbalance the rapid growth of the agricultural crops. Neither did it prevent a marked increase in the imports from foreign countries.

(5) It was fortunate that the foreign demand for American farm products grew rapidly during these years of increasing production. One of the greatest obstacles to the foreign trade in grain, flour, and provisions had been the corn laws of Great Britain. These were in 1846 superseded by a system of gradually declining import duties which, in 1849, reached a free-trade basis, thereby opening Great Britain to American foodstuffs under favorable conditions. Just as the tariff barriers were being removed, Ireland suffered a severe food famine and was obliged to import breadstuffs from abroad.

TABLE 52.—*Value of exports and imports of the United States, 1846 to 1860.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports.
1846	$102,142,000	$11,347,000	$113,489,000	$121,692,000
1847	150,311,000	8,338,000	158,649,000	146,546,000
1850	136,947,000	14,952,000	151,899,000	178,138,000
1855	246,709,000	28,448,000	275,157,000	261,469,000
1858	293,758,000	30,886,000	324,644,000	282,613,000
1859	335,894,000	20,895,000	356,789,000	338,768,000
1860	373,189,000	26,933,000	400,122,000	362,166,000

In 1854, moreover, the agents of the United States and Canada negotiated a reciprocity treaty which went into effect in the following year. This treaty provided for reciprocal freedom of trade in the chief agricultural and raw products of both countries, and the mutually free markets for these commodities increased to some extent both the export and import trade. The effect in the United States, however, was chiefly upon imports, for nearly all the articles included in the treaty, except rice, cotton, naval stores, and tobacco, were those of which Canada had a surplus. American manufactures, not being included in the treaty, were barred from Canadian markets by gradually increasing tariffs.

(6) While the export trade was encouraged by the adoption of the free-trade policy in Great Britain, public sentiment in the United States was once more swinging in favor of reduced import duties. In 1846 the protective-tariff policy of the United States was modified by the Walker act, and in 1857 a still further reduction in the tariff rates was made. The moderated duties remained in force until the Civil War, and opened the door to foreign iron and other metals, to manufactures of iron, wool, cotton, leather, glass, paper, wood, wool, and sugar.

Stimulated by the various events mentioned above, the foreign trade increased with great rapidity. The value of all exported commodities

rose from $113,489,000 in 1846 to over $158,649,000 in the following year, and to over $400,000,000 in 1860. The exports of domestic products advanced from a value of over $102,000,000 in 1846 to $373,189,000 in 1860, and during the same period the value of the import trade increased from $121,692,000 to over $362,000,000. The panic of 1857 caused a temporary decline, but within less than a year after the crisis there was a full recovery and both imports and exports steadily advanced.

The export trade was especially buoyant. Although exports had occasionally exceeded imports in the past, it was during this period that the favorable balance of exports became a feature of American commerce. With the single exception of rice, the increase in the exports of the leading agricultural commodities was general. Even had there been no progress in the shipment of farm products other than cotton, the export trade would have moved to a higher level, for cotton exports increased from 1,667,000 bales in 1846 to the unprecedented total of 3,774,000 in 1860, from a value of $42,767,000 to $191,806,000. Now, however, for the first time, western grain and provisions became items of real importance in the foreign trade. It has been aptly stated that "one may perhaps date the creation of a world market for grain from the year 1846, when Great Britain became a large importer."[1] In 1860, the United States exported 4,155,000 bushels of wheat and 3,314,000 of corn, 2,612,000 barrels of wheat flour, and provisions valued at $16,612,000. In 1840, the total exports of foodstuffs had been valued at $20,500,000, but their value in 1860 had risen to $50,791,000. A few years earlier, in 1857, when the grain crop was large and the home demand temporarily at low ebb, 14,570,000 bushels of wheat, 7,505,000 bushels of corn, and 3,712,000 barrels of wheat flour had been shipped to foreign markets. In that year the exports of breadstuffs alone were valued at over $55,500,000.

The foreign trade in forest products also increased. In 1853, lumber exports had been valued at $2,832,000, but during the following year they suddenly rose to $5,419,000, and by 1860 they had reached a value of $6,414,000. The exports of leaf tobacco advanced from $8,478,000 in 1846 to nearly $16,000,000 in 1860 and in 1857 aggregated $20,610,000. Substantial gains were made in the shipment of manufactured goods. In 1860 the exports of cotton goods were valued at $10,935,000, iron products at $5,870,000, wood manufactures at $10,048,000, and a promising beginning had been made in the foreign shipment of tobacco manufactures, leather goods, chemicals, vehicles, and copper manufactures. The total exports of manufactures rose from $15,425,000 in 1840 to $23,223,000 in 1850, and $48,453,000 in 1860.[2]

[1] *Monthly Summary of Commerce and Finance, January 1900*, p. 1998.
[2] As compiled by the Bureau of Statistics, Department of Commerce and Labor, *Exports of Manufactures from the United States and their Distribution, 1800 to 1906*, p. 28.

The foreign trade in naval stores, which had long lost its prominent position, increased in value from less than $1,000,000 to nearly $4,000,000. Exports of fish and whale products likewise advanced slightly, but the once controlling position of the fisheries in the foreign trade was permanently taken by the cotton of the South, the grain-fields and packing-plants of the West, and the factories of the East.

The export trade flowed in growing volumes to nearly all the great markets of the world. England afforded a large foreign market for cotton, flour, wheat, corn, and provisions. In 1846, American exports to England were valued at $42,781,000, and by 1860 they reached a total of over $187,000,000. The exports to France rose to over $59,000,000. In Ireland and Scotland, in Bremen, Hamburg, Holland, Russia, Norway and Sweden, and even in Spain and Italy, the market for American agricultural exports increased. In no part of commercial Europe did the American trade fail to grow except in Denmark, Austria, and Belgium. Many other parts of the world bought, in constantly increasing quantities, the products of the United States. The reciprocity treaty with Canada and the treaty of peace with Mexico opened the markets of the nearest neighbors of the nation, while Commodore Perry's famous visit to Japan and the treaty with China following the British-Chinese opium war secured the free admission of American vessels and products to various ports of the two great nations of the Far East; the "sugar-trade period" of the Hawaiian Islands began in 1853, and the discovery of gold in Australia in 1851 soon created in that continent a market for American foodstuffs and mining machinery. Larger markets were found in Brazil, Argentina, Chile, and Peru, in Cuba and the British West Indies, in the British East Indies, and in Africa. In fact, with but one important exception there was a constant expansion of the export trade to all markets. The exception was the West Indies. In Cuba and the British islands alone was there an increasing trade, the shipments to Haiti, the Dutch, French, and Danish islands either remaining about the same or declining to a lower level.

The development of the import trade was in a somewhat different direction. While 77.5 per cent of the export trade centered in the Old World markets, less than 60 per cent of the imports came from European countries. The excess of exports over imports, which had come to be a regular feature of the foreign trade of the United States during this prosperous era, was due almost entirely to the favorable balance which appeared in the European trade. The import trade with England and all the north European countries, except Denmark, Russia, and Norway and Sweden, gradually increased, but in no case, except in the trade with Germany, did the imports increase as rapidly as exports, and the imports from the countries south of France actually declined in volume. Except in the case of the trade with Australia and Africa, in which the imports and exports were practically

equal, the import trade with non-European countries increased at a more rapid rate and was larger than the export trade. The imports from South America rose from $16,647,000 in 1850 to nearly $36,000,000 in 1860; those from foreign North America during the same decade grew from $24,136,000 to over $75,000,000; those from the Orient advanced from $10,315,000 to $26,202,000. Aside from the imports of rough Canadian lumber after 1854, there were no marked changes in the nature of the commodities imported. The relative proportion of tropical and subtropical foods and of raw materials for use in American industries increased to some extent, and that of manufactures declined, but in 1860 over 57 per cent of the imports still consisted of foreign manufactures.

One of the notable features of the growth in the foreign commerce of the nation during these fourteen years was the revival of the foreign carrying trade. Nothing serves better to show the increase in the volume of the foreign commerce than the fact that the aggregate vessel entrances and clearances rose from 6,300,000 gross tons in 1846 to 17,067,000 in 1860. Of the entrances and clearances in 1860, 71 per cent was made by American vessels, and 66.5 per cent of the value of the total foreign trade for the year was carried in American bottoms. The relative proportion carried in American ships was less than it had been in the past, but nevertheless the American vessel tonnage engaged in the foreign trade reached the highest point in its entire history. During the three decades following the war of 1812, American shipping, suffering from the reverses caused by the loss of the European carrying trade after the close of the Napoleonic wars, the substitution of shipping reciprocity for shipping protection under the acts of 1815 and 1828, and the many years of unsteady foreign trade, did not prosper greatly, and in 1846 the total burden of vessels engaged in foreign trade amounted to only 943,000 tons, which was less than the tonnage owned in 1810. After 1846, however, the gross tonnage of the ocean fleet rapidly increased, reaching the unprecedented total of 2,379,000 tons in 1860. In the following year it aggregated 2,496,000 tons—the highest point in the history of American shipping.

SUMMARY AND CONCLUSION

The foreign commerce of the United States had a remarkable growth during the forty-five years prior to the Civil War. The nation saw its exports rise from $52,558,000 in 1815 to over $400,000,000 in 1860; its imports from $113,041,000 to over $362,000,000; its deep-sea entrances and clearances from 1,735,000[1] to 17,000,000 tons. The gross tonnage of its ocean fleet rose from 854,000 to 2,379,000 tons. Though the course of this development was rendered irregular on account of the recurring years of depression and stagnation, the period

[1]Year 1821; official data for previous years not available.

as a whole was nevertheless one of great expansion, and in the general prosperity which marked the closing years the foreign trade reached the highest stage of development ever attained up to that time.

During these years of prosperous growth the general character of the foreign commerce was in many respects considerably altered. First of all, there was a permanent relative decline in the volume of foreign re-exports. The yearly re-exportation of foreign commodities, which had been such a prominent feature of the American over-sea trade during the Napoleonic wars, dwindled away, and domestic commodities, the products of the farms, forests, and factories of the United States, made up most of the cargoes for the export trade. The constant growth in the exportation of domestic products brought about, as another noteworthy change, a great rise in the importance of exports as compared to imports. Though the import trade was, throughout the greatest part of the period, of larger value than the export trade, the steady development of the manufacturing and agricultural industries of the United States and the altered commercial policy eventually created conditions which produced an excess of exports. Radical changes occurred in the nature of the domestic exports. Though the leaf-tobacco crop increased in volume, the increase was not so much in Maryland and Virginia as in the Middle West, and the relative importance of tobacco as an export was permanently lost. Exports of fish and naval stores likewise increased to some extent, but relatively they occupied an unimportant position in the total foreign trade. Indigo exports all but disappeared, and the fur and rice trades declined to insignificance. The place of these long-standing exports was taken by new products. Throughout this entire period cotton was the undisputed king of exports; western flour, wheat, corn, and provisions gradually became important items; the foreign lumber trade, which had been light for many years, revived during the fifties, when the lumber industry moved into new regions; and gradually some of the factories and mills which were fostered by congressional aid sought foreign as well as domestic markets. These changes were the inevitable consequence of the fundamental industrial transition which was slowly taking place. The South turned from tobacco, naval stores, indigo, and rice to cotton; the North from fishing and the fur trade to agriculture and manufacturing. The vast farming resources of the Mississippi Valley were tapped, and improved transportation facilities connected this western empire with the large seaports to the east and south.

In addition to the marked alteration in the volume of the foreign trade, there was a great change in its geographical bases. The country itself grew in area. Florida was added to the national domain in 1819, Texas in 1845, the Oregon country in 1846, California and the region between Texas and the Pacific in 1848 and 1853, and with the acquisition of this immense territory the export trade ceased to be confined to

the Atlantic States from North Carolina to New England. Texas and California in 1860 had a greater export trade than Pennsylvania or Virginia; New Orleans during various years exported greater quantities of domestic products than New York; and the exports of Alabama also exceeded those of every Atlantic State except New York. The import trade confined itself more nearly to its old-established channels. The South did much of its importing indirectly through the ports of the North Atlantic. In 1860 New York handled 70 per cent of the entire import trade of the country, an aggregate of $248,000,000. Massachusetts was second with imports valued at $41,000,000, and Louisiana third, with less than $23,000,000.

As the foreign trade grew larger, it gradually lost much of its adventurous character. Instead of being obliged to develop a speculative and hazardous trade in far-off, unknown lands, most of the exporters were able to turn their attention chiefly to the possibilities of trade with Europe. The markets in the Orient, South America, Canada, and Australia became larger, but the bulk of the cotton, grain, flour, and provision exports could most readily be sold in Europe. The old markets of the West Indies, which had been the mainstay of the New England and middle colonies, gradually declined, relatively and actually. During these years, as before, China, Manila, the East Indies, Africa, Brazil, and the newer regions of the world offered opportunities to the importer rather than to the exporter.

A great change took place in the relative positions of the domestic and foreign commerce. Great as was the growth of foreign trade, the internal commerce grew more rapidly, and before 1860 it had far surpassed in volume the commerce with foreign nations. During the period from 1815 to 1860 the "American system" arose in response to the demand for home manufactures and home markets for agricultural crops. A large number of populous industrial and commercial cities grew up to provide a domestic market for the agricultural, sea, and forest products of the country. A sectional specialization of industry led to an ever-increasing volume of exchanges among the various parts of the Union, and American producers, with the exception of the cotton planters, were freed in a large measure from the dependence upon a foreign market, which had characterized their economic condition of former years.

CHAPTER XXV.

CHANGES EFFECTED BY THE CIVIL WAR.

Effects of the war upon export trade, 54. Trade of the blockade-runners, 57. Foreign trade in cotton, 58. The war and the import trade, 58. After-effects of the Civil War upon industry, 59; commerce of the South, 60; shipping, 61, and import duties, 62. The Civil War an epochal period in the history of the foreign commerce, 63.

Throughout the period from 1830 to 1860, when both foreign and internal commerce were expanding and the country as a whole was prosperous, there was discontent in the South. Having few products at that time to sell in the domestic market and few manufacturing industries to protect, and producing large quantities of cotton to sell in foreign markets, and having to purchase many wares abroad or in the North, the Southern States were hostile to the protective tariff. With heavy investments in slaves and with agricultural industries based upon slave labor, they bitterly resented the growth of the anti-slavery sentiment in the North. To the people of the Southern States, the interests of the North and South appeared to be wholly apart.

As might have been expected, the secession of the Southern States occasioned a temporary panic among the business houses of the entire country. The wonder is that the business of the Northern States recovered so soon. The foreign as well as the domestic trade of the South was almost completely demolished by the invading armies and the blockading men-of-war; but in the North the domestic trade soon recovered from the first shock and the foreign trade became unusually active.

EFFECT OF THE WAR UPON EXPORT TRADE.

The recorded export trade of the country as a whole, as is shown in table 53, fell from over $400,000,000 in 1860 to $227,558,000 in 1862, but this decline was due quite largely to the almost complete absence of southern cotton exports. It is no less than remarkable that the official exports of the country, aside from cotton, actually increased in value from $208,315,000 in 1860 to $215,294,000 in the following year, and to $261,469,000 in 1863. The North Atlantic ports were busier than they had ever been in their entire previous history, for various events directed an unusual volume of surplus goods in their direction.

(1) The agricultural crops of the North, instead of declining when great armies of men left the farms in answer to the call of President Lincoln, were very greatly increased. Women worked in the fields, farm machinery was rapidly introduced, immigrants came from abroad, thousands of families migrated northward from the border

States, and cheap lands were offered by the Federal Government, the railroads, and the States. The wheat crop of every war year exceeded the record crop of 1859, and the principal western wheat States doubled their output. The corn crop of the country as a whole declined somewhat, but in the Western States it, too, increased.[1] While only the usual number of hogs were raised, the number put on the market was larger than ever before and the number packed was almost doubled.

TABLE 53.—*Recorded exports and imports of the United States during the Civil War.*

Year.	Exports of merchandise.	Exports of merchandise and specie.	Exports other than cotton.	Imports of merchandise.	Imports of merchandise and specie.	Excess of exports.
1860	$333,576,000	$400,122,000	[1]$208,315,000	$353,616,000	$362,166,000	$37,956,000
1861	219,554,000	249,345,000	215,294,000	289,311,000	335,650,000	[1]86,305,000
1862	190,670,000	227,558,000	226,378,000	189,357,000	205,772,000	21,786,000
1863	203,964,000	268,121,000	261,469,000	243,336,000	252,920,000	15,201,000
1864	158,838,000	264,235,000	254,339,000	316,447,000	329,563,000	[2]65,328,000
1865	166,029,000	233,673,000	226,837,000	238,746,000	248,556,000	[2]14,883,000

[1]Cotton exports accepted as given in Evans, *Domestic Exports, 1789–1883*, p. 126.
[2]Excess of imports.

TABLE 54.—*Tonnage of entrances and clearances and percentage American and foreign vessels during the Civil War.*

Year.	Entrances and clearances.	Percentage of tonnage American.	Percentage of trade in American vessels.
	Gross tons.		
1860	17,065,000	71	66.5
1861	14,393,000	70	65.2
1862	14,702,000	69	50.0
1863	14,766,000	62	41.4
1864	13,370,000	46	27.5
1865	12,781,000	47	27.7

(2) Protected by heavy war tariffs, practically all the manufacturing industries of the North rapidly increased their output. There were but two important exceptions—the cotton mills and the whisky distilleries. The former, being unable to obtain sufficient raw cotton, were temporarily displaced by woolen mills, and the latter, suffering from the heavy excise taxes on whisky, were partly replaced by an increasing number of breweries. The flour, meat-packing, woolen-textile, sugar-refining, lumber, leather, and iron industries, after the first shock of the war panic, continued to enjoy the prosperity which had begun before the war. The petroleum industry, which began in 1859, continued throughout the war; even the shipments of whale oil to foreign markets made progress until the *Shenandoah* went on its voyage of destruction among the defenseless North Pacific whaling-ships.

[1]Fite, *Social and Industrial Conditions in the North During the Civil War*, 2.

(3) A larger share of the increased agricultural crops and of the output of manufactures sought foreign markets because the home demand was inadequate. The trade between the North and South was almost completely stopped and the requirements of the East and West were too small to absorb the total supply.

(4) Fortunately, a heavy demand for American foodstuffs arose in European countries. The crops of England were a failure in 1860, 1861, and 1862, and Russia, Prussia, and France, which, with the United States, were the usual granaries of Great Britain, were unable to respond with increased shipments. The British Government, the friend of the South, was reluctant to admit that northern grain as well as southern cotton were of vital importance to the economic welfare of Great Britain; yet the need of American wheat and flour, if it did not prevent the recognition of the Confederacy by Great Britain, at least contributed to that result.[1]

(5) The brunt of the war was borne by the South. The Mississippi River route to the Gulf of Mexico was for long periods of time practically closed to navigation, and this compelled the agricultural exports of the West to be marketed in the East and exported through the North Atlantic ports. The east-and-west trunk-line railroads carried a large tonnage of farm products; the lake route from Chicago and Milwaukee to the East became an established avenue for grain exports, and the Erie Canal as usual competed for a share of the western tonnage. The exports of every North Atlantic State from Maine to Maryland were greater in volume and in value during the war than they had been in 1860.

The increased exports included practically all products of western agriculture. During the years 1860 to 1862, wheat exports rose rapidly from 4,155,000 to 37,290,000 bushels, corn from 3,314,000 to nearly 19,000,000 bushels, and wheat flour from 2,612,000 to 4,882,000 barrels. During 1864 and 1865 the foreign shipments were somewhat less than in 1862, but they remained in excess of what they had been prior to the outbreak of the war. Increased quantities of bacon and hams, lard, tallow, pork, cheese, butter, soap, iron manufactures, boots and shoes, and whale oil were likewise shipped to foreign markets.

The growing agricultural exports went chiefly to the food-importing centers of the Old World—England, Hamburg, Bremen, Holland, and Belgium. But the exports to Canada, the West Indies, South America, Africa, Australia, China, and the East Indies continued to increase, none of them losing ground. These non-European countries, not being purchasers of cotton, were not so vitally affected by the blockade of southern ports. The only important markets in which American trade fell abruptly and remained at low ebb until peace returned were the grain-producing countries of Europe—France, Austria, Hungary,

[1] Fite, *Social and Industrial Conditions in the North During the Civil War*, 19.

Italy, Russia, Prussia, Norway and Sweden, and Spain. When the cotton trade with England was suspended, the grain trade largely took its place; but unfortunately the nations of continental Europe were not importers of grain and they did not increase their imports of other American products.

Few exports from northern ports were adversely affected by the war. The exports of cotton and cotton goods, of course, suffered as a direct result of the conflict. Practically all of the enlarged output of woolen goods was needed to clothe the northern armies; the exports of naval stores and rice were less than they had formerly been, because these products came chiefly from the Southern States; and the exportation of live-stock declined, because the practice of shipping packed meats developed. The exports of tobacco and tobacco manufactures, pig-iron, lumber, cars and carriages, bread, and biscuit, while they did not increase, maintained the level which they had reached during the period between 1847 and 1860.

It was chiefly those branches of the foreign trade dependent on cotton that suffered during the war. Little cotton except that which escaped the watchfulness of the Federal blockading fleet was exported after 1861. Blockade-running is pictured as follows by James Kendall Hosmer:

> "Privateering, which in 1861 Jefferson Davis sought to encourage by the issue of letters of marque, did not prove profitable, as private ships found better profit in blockade-running. Soon ordinary craft gave way to vessels built especially for this purpose. Cargoes shipped from Europe were transferred at the Bermudas or Nassau to long, narrow vessels, in which everything was sacrificed to speed; gray in color, these veritable ocean greyhounds could not at the distance of a few hundred yards be distinguished in the shadows against the sea, the horizon mist, or the sandy shore. Creeping stealthily landward, they dashed by night at full speed through the blockading lines, the breakers on the bar making the engines inaudible, the swiftness of the almost invisible apparitions baffling the keenest vision. . . . The ingoing cargoes brought huge profits; and the cotton, laden with which the blockade-runners came out, was better than a gold mine. It was no uncommon thing to clear $150,000 each way. With such gains possible, blockade-running was profitable even though the vessel made only a trip or two before capture."[1]

Yet skillful and venturesome as the southern blockade-runners were, relatively little cotton reached the mills of England and Europe after 1861; and southern statesmen were in hopes that the dearth of cotton would cause England to intervene in favor of the South. To tide over the threatened war period, 3.794,000 bales had been exported in 1860, and much of the crop of 1861 was likewise hurriedly shipped away before an effective blockade was established. In October 1861, however, many British mills began to run on short time, largely because they had temporarily overstocked their markets, and soon thereafter

[1] Hosmer, *Outcome of the Civil War*, 165, 166.

many of them were in difficulty, because the cessation of American cotton exports resulted in a "cotton famine."[1] The receipts of American cotton at British ports, as reported abroad, fell from 1,841,600 bales in 1861 to 71,766 in 1862, to 131,900 in 1863, to 197,800 in 1864, and to 462,000 in 1865. The receipts at continental European ports fell from 971,000 bales in 1860 to about 60,000 in 1862, 36,000 in 1863, 43,000 in 1864, and 68,000 in 1865.

The temporary glut of the British market in 1860 and 1861 and later the cessation of cotton imports from the South resulted in great hardship among the British operatives. In 1862, 165,600 Lancashire operatives were working short time, 247,230 were idle, and 485,000 people, or over 24 per cent of the inhabitants, were dependent upon public relief.[2] On the Continent, the plight of the mill-workers was less severe, for the cotton industry was less centralized, and the slower spindles were more easily adapted to India cotton; but there, too, the cotton trade was in a serious condition.[3]

An attempt was made to substitute for the American staple cotton from other countries. The total cotton imports of Great Britain declined from over 3,000,000 bales in 1861 to less than 1,500,000 in 1862, but in 1864, because of Indian, Mediterranean, and Brazilian imports, they exceeded 2,500,000 bales, and the imports of non-American cotton into continental Europe also increased from 100,000 bales in 1860 to 889,000 in 1864. The importation of foreign cotton did not, however, solve the cotton famine, for the short-staple cotton of India was unsuited to most of the spindles of England and to many of those in continental Europe. The constant delay due to breaking threads made the name "Surat" a hated epithet in Lancashire.[4]

Although the suffering of the British cotton interests was severe, the hopes of the South for foreign intervention were not realized. Southern cotton was not of sufficient importance to bring about British intervention, or even to induce England to recognize officially the independence of the Confederacy. The people of Great Britain did not favor slavery, and the Government was prevented from recognizing the revolting States.

THE WAR AND THE IMPORT TRADE.

The import trade during the war of secession likewise was maintained at a surprisingly high level, but after 1861, as is shown in table 53, it did not exhibit the activity which characterized the export trade of the Northern States. The direct import trade of the South, aside from the occasional arrival of blockade-runners, came to an end, and that portion of the import trade which had in times of peace entered the

[1] Arnold, *The Cotton Famine.* [2] Ellison, *The Cotton Trade of Great Britain*, 95.
[3] Williams (an English broker), "Position of the Cotton Trade at the close of February, 1863," in *Political Economy Pamphlets*, No. 277.
[4] Hammond, *The Cotton Industry*, pt. 1, 276.

South indirectly through northern ports was small throughout the war. The high import duties imposed as a means of raising the necessary war revenue acted as a partial barrier to all imports, and the increased output of nearly all the manufacturing industries of the Northern States, except the cotton mills and whisky distilleries, supplied an enlarged portion of the American market for manufactures.

While, on the whole, the imports of the Northern States were well maintained and their exports were in a prosperous condition, one phase of their trade—one industry—suffered severely at the hands of Confederate cruisers and privateers.[1] "The most terrible blow struck by the war upon any interest was that upon the merchant marine."[2] Just as the Napoleonic wars had benefited American shipping, the Civil War aided the shipping of Great Britain and other foreign neutrals. The American marine decreased rapidly in consequence of the ruinous onslaughts of the *Alabama*, the *Shenandoah*, the *Sumter*, and some 22 other vessels which comprised the Confederate fleet of "commerce-destroyers." But a much more severe loss than the 284 or more northern merchant vessels captured, were the thousand vessels which, because of risks of capture and because of the excessive insurance rates, were transferred to foreign flags. Moreover, many American vessels remained idle, while the north Atlantic ports of the United States were crowded with British and other foreign ships. All shipping, moreover, was obliged to pay the increased tonnage duties levied to secure a larger revenue. As is shown in table 54, the American tonnage engaged in the foreign trade of the United States declined from 71 per cent of the total in 1860 to 46 per cent in 1864; and the proportion, calculated in terms of value, of the total recorded foreign trade of the country carried on in American bottoms fell from 66.5 per cent to 27.5 per cent. Such American vessels as did not remain idle were obliged to sail without full cargoes or with the less valuable cargoes, for few merchants intrusted their wares to an American vessel, if a foreign ship was available.

AFTER-EFFECTS OF THE WAR.

The effects of the Civil War upon the foreign trade did not end with the overthrow of the Confederacy. Certain after-effects, some injurious and others good, were felt for many years:

(1) The war left the cotton-export trade in a crippled condition from which it did not recover for more than a decade. It was not until 1875 that either the cotton crop or the amount shipped abroad permanently regained the volume of the years before the war. Meanwhile, cotton was no longer the king of exports, and it did not regain that position until the close of the nineteenth century. The cotton trade had to pass through long years of transition. There was abject poverty in

[1] Edge, *The Destruction of the American Carrying Trade.*
[2] Fite, *Social and Industrial Conditions in the North during the Civil War*, 147.

many cotton-producing sections; buildings had been destroyed or had deteriorated; tools had been lost or broken; live-stock had been lost or confiscated; there was not food enough on some plantations to feed the owner and his former slaves until a new cotton crop had been harvested. To repair these losses and to secure the necessary capital required time.

The abolition of slavery, aside from the monetary loss entailed, overthrew the existing industrial structure. The situation appeared so hopeless that a general decline in southern land values occurred, causing the further impoverishment of the much-tried cotton planter. Great difficulty was experienced with the labor problem. To many negroes freedom meant idleness, and both for this reason and because of the difficulty of paying regular weekly or monthly wages, the "wage system" proved unsatisfactory. The plan generally adopted was the "cropping system," which took different forms, but was based upon the idea of giving the laborer an interest in the crop. Soon also there began a decided movement to change from the plantation system to that of smaller cotton farms owned by the individual cotton growers or worked by tenants. The number of farms of less than 100 acres in the cotton-belt grew from 333,000 in 1860 to 517,000 in 1870, and the average size of cotton farms declined from 401.7 to 229.8 acres.

The change from plantation to small farm required a new agricultural credit system. Even before the war large planters had sometimes borrowed money from the port factors, or from large interior bankers, with the growing crop as collateral. After the break-up of the large plantations, however, the need of loans to tide the smaller growers over the planting, growing, and harvesting seasons became widespread, and as the amounts needed by individual growers were too small to warrant dealing with distant port factors, they turned instead to the local merchant, banker, and landlord. The loaning system was expensive, although necessary at the time, and it still prevails throughout many sections of the Eastern cotton-belt.

After the war, also, the system of marketing directly through port "factors" was largely displaced by the system of sales to interior merchants; a practice which involved the use of many middlemen. The grower sold to the local merchant, landlord, or banker to whom he had pledged all or part of his crop. Then the cotton exported to England often passed successively from the local buyer to the commission men at the larger interior centers, to the dealers at the ports of export, to the local agents of exporting companies, to importers at Liverpool, and finally through Liverpool brokers to the spinners at Manchester. Since the later seventies the tendency has been to eliminate superfluous dealers, but during the transition period and until the financial condition improved, until the Atlantic cable made possible direct sales, and until the competition between spinners became more general, the expensive system of conducting business through many middlemen prevailed.

(2) For many years after the close of the war, the import trade of the Southern States was in a crippled condition. The purchasing power of the cotton planters had been greatly reduced, and the negroes were without resources. While the practice of growing almost nothing but cotton was conducive to the development of the import trade, the limited ability to purchase prevented its attaining a large volume.

(3) The crushing effect of the Civil War upon the American merchant marine was more than temporary. Probably the marine would ultimately have declined even had there been no war,[1] but, coming at a critical time, the four years of competition with neutral vessels, transfer to foreign flags, Confederate captures, and high insurance rates and tonnage taxes constituted a blow from which the deep-sea fleet has never recovered. The war camé at the time when the shift from steam to sail and from wood to iron and steel had begun to make headway in the ship-building industry, and when other fields of investment began to attract capital. The Government did almost nothing to assist the ship-owners in their hour of need. Congress refused to readmit to American registry the vessels that had been transferred to foreign standards, did not repeal the war tonnage taxes until 1868, did not permit the free importation of materials for wooden sailing-vessels until 1872 and for iron and steel vessels until 1890, and made no provision for liberal ocean mail payments. But three unimportant mail payment contracts were let during the entire period from the Civil War to 1891. During the decade 1865 to 1875, when foreign vessels were no longer benefited by a condition of neutrality, the American proportion of the total vessel movement in the foreign trade, instead of recovering, declined from 47 per cent to 30 per cent; the proportion of the foreign trade carried in American bottoms fell from 27.7 per cent to 26.1 per cent; and the registered merchant fleet of the United States dropped from 1,602,000 to 1,554,000 gross tons.

(4) The Civil War did much to strain the friendly relations which had existed between the United States and Great Britain. For commercial reasons, if not for other purposes, the British Government had sympathized with the Southern States. She had granted them the rights of a belligerent, had permitted the construction and equipment of Confederate warships at British ports, and had connived in the practice of blockade-running. The British West Indies, the Bermudas, and Nassau had been favored havens of southern blockade-runners, and Canada had been a base for a number of unimportant southern attacks in New York and Vermont.[2] Though the more conservative public leaders in the United States successfully discouraged the desire to retaliate, the feeling of resentment ran high. It was partly for this reason that the reciprocity treaty with Canada was not renewed in

[1] Johnson, *Ocean and Inland Water Transportation*, chap. xx.
[2] Headley, *Confederate Operations in Canada and New York*.

1866. The road returning to friendship was not paved until 1872, when the arbitration tribunal at Geneva awarded $15,500,000 to the United States for vessels destroyed by Confederate men-of-war built in British ports.

(5) The high import duties which had been imposed for revenue purposes during the war were maintained after the return of peace in pursuance of a protective tariff policy. Low tariffs had prevailed during the years 1846 to 1860, but the war made higher duties a necessity and protective sentiment was sufficiently strong to maintain and even to increase the high duties after the war ended. The South, which had for many years been the chief opponent of protection, was for a time unable to offer serious opposition, and the West and East, respectively, were generally in favor of home markets for farm products and protection for industries. The high duties were a partial barrier against foreign imports, and to whatever extent they developed home markets, they tended to restrict the exportation of farm products. In the proportion that they contributed to the growth of the manufacturing industries, they may have led the way to a larger export trade in manufactured goods.

(6) The Civil War affected the foreign trade not only through its influence upon the tariff policy, but also by encouraging the concentration of capital. The expansion of business in the Northern States, which occurred during the war, caused the free competitive system to begin to break down. During the war consolidation began, and the process has continued to the present in almost every branch of business except agriculture. Its effects on commerce, domestic and foreign, have been manifold. Aside from the many effects which are the subject of controversy, it has been clear that the large producers have been better able to compete successfully with producers of foreign wares; and that, with certain exceptions, the rapid progress which has been made in the exportation of manufactures has been brought about largely through the efforts of the great industrial consolidations.

(7) It was during the war that the first effective encouragement was given to the long-discussed construction of transcontinental railroads. For reasons, partly commercial and partly political and military, the Federal Government subsidized the Union Pacific-Central Pacific line with land grants of 20,000,000 acres and loans of $55,000,000 in government bonds. The hopes of developing Oriental commerce, of increasing trade between the Pacific coast and the Middle West and the East, of building up local traffic by developing the far western country, and of realizing profit from the sale of land were the commercial motives of the undertaking, but the reason why men of political prominence took an unusual interest in the project was the desire to connect the West with the East, to tie California and the northwest country to the settled regions of the Union and thereby prevent the likelihood of

foreign invasion or secession. The policy of subsidizing transcontinental railroads once being established, various other lines also obtained extensive grants of public land, and the opening of the West was hastened, with obvious effects upon the foreign as well as the internal commerce of the entire country.

(8) Wildcat banking was at its height during the first part of the Civil War, but when effective financing was essential to the successful prosecution of the war, the Federal Government provided for the regulation of the banking system of the country. The enactment of the national banking act in 1863 proved of incalculable aid to commerce, but since its influences were not peculiar to the foreign trade, it need not be more fully discussed at this point. Numerous States and many voluntary banking associations also undertook banking and currency reforms during the war, and a general effort was made—State and national—to suppress counterfeiting.

The Civil War was in many ways epochal in the history of the foreign commerce of the United States, though it can not be said that the results of the conflict taken as a whole worked directly towards a greater foreign trade. For many years to come the conscious policy of the nation was the development of American industries and the creation of home markets. Internal development, however, so increased the volume of the agricultural crops and the output of the forest, mining, and manufacturing industries, that a growth of exports became inevitable and the consequent increase in the purchasing power of the people and the growing need for the raw materials from other lands laid the basis for a greater import trade. The Civil War also emphasized the vastness of the country's resources. Four years of the bitterest conflict caused scarcely a ripple in the course of economic progress in the Northern States. Foreign markets replaced the domestic markets which were temporarily lost or shrunken, and the development of resources and industries which began before the war was continued. The South, which was stricken with all the losses incident to a crushing defeat, quickly recovered. Her staple crop is again the king of exports; her lumber, her naval stores, and her tobacco are of international importance. Her fruit, rice, sugar, iron, oil, coal, and phosphate, each in its way, influence the course of foreign trade, some products being exported, while others have displaced foreign commodities which would otherwise be imported from abroad.

CHAPTER XXVI.

THE FOREIGN TRADE FROM THE CIVIL WAR TO THE CLOSE OF THE NINETEENTH CENTURY.

Increase in import and export trade, 64. Price fluctuations, 1870–1900, 65. Changing relations between imports and exports, 66. The leading exports of the United States, 66. Growth in value of each, 1865–1900, 67. Domestic exports classified according to uses, 70. The growth of foreign markets, 72. Value by groups of the leading imports of the United States, 77. Sources of the imports into the United States, 78. Widened basis of American foreign trade, 81. The carrying trade, 84.

At the close of the Civil War there was a brisk recovery of the foreign trade of the United States. The imports and exports of the Northern States, which had been maintained even during the war, took an upward course, and those of the Southern States soon recovered much of their former volume. As soon as the ruined cotton plantations could be reorganized, the exports of cotton shipped from southern ports again increased, and other southern commodities were shipped abroad; but the import trade of the South lagged behind because the purchasing power of the population had been greatly reduced by the ravages of the war.

The value of the total exports of merchandise quickly rose from $166,029,000 in 1865 to $348,859,000 in 1866, and imports grew from $238,745,000 to $434,812,000. This sudden advance was, to some extent, abnormal, both exports and imports consisting in part of cargoes which had been held back by merchants awaiting the return of peace; moreover, the increase was apparent rather than real, the augmented value being due partly to an abnormal rise of prices. For several years thereafter the foreign trade remained at a somewhat lower level, but by 1870 there was a widespread recovery. Imports of merchandise in that year aggregated $435,958,000 and exports $392,772,000.

From 1870 to the end of the nineteenth century there was a pronounced, though at times irregular, growth in the foreign trade. Imports of merchandise increased to a value of $667,955,000 in 1880 and to $849,941,000 in 1900. Exports of merchandise increased even more rapidly, and with almost uniform regularity they exceeded the value of imports. In 1880 they amounted to $835,639,000 and in 1900 $1,394,483,000. The value of the annual imports of merchandise increased 95 per cent from 1870 to 1900, and that of exports 255 per cent. The total entrances and clearances at American ports of shipping engaged in the foreign trade, as is shown in table 55, increased from 18,325,000 tons in 1870 to 56,444,000 in 1900, an advance of 208 per cent.

The wide fluctuations in the prices of commodities which occurred during the period 1865 to 1900 exerted a direct influence upon the value

of imports and exports as reported to the customs collectors, and it is necessary to analyze the figures of foreign trade values with unusual care. The course of prices in the United States can be ascertained with reasonable accuracy from the price index numbers compiled by the Bradstreet and Dun commercial agencies, by the Aldrich Committee of the Senate in its report on wholesale prices,[1] and by the United States Bureau of Labor, while from the *London Economist* and from the tables compiled by Mr. Augustus Sauerbeck[2] price movements for Great Britain may be obtained. The annual average export and import prices of particular commodities may also be ascertained.

TABLE 55.—*Value of exports and imports of the United States. Vessel entrances and clearances, five-year periods, 1865 to 1900.*[1]

Year.	Exports of merchandise.	Exports of merchandise and specie.	Imports of merchandise.	Imports of merchandise and specie.	Excess of total exports.	Entrances and clearances in foreign trade.
						gross tons.
1860	$333,576,000	$400,122,000	$353,616,000	$362,166,000	$37,956,000	17,065,000
1865	166,029,000	233,673,000	238,746,000	248,556,000	[2]14,883,000	12,781,000
1870	392,772,000	450,927,000	435,958,000	462,377,000	[2]11,450,000	18,325,000
1875	513,443,000	605,575,000	533,005,000	553,906,000	51,669,000	23,589,000
1880	835,639,000	852,782,000	667,955,000	760,989,000	91,793,000	36,054,000
1885	742,190,000	784,421,000	577,527,000	620,770,000	163,652,000	30,820,000
1890	857,829,000	909,977,000	789,310,000	823,287,000	86,690,000	36,256,000
1895	807,538,000	921,302,000	731,970,000	788,566,000	132,736,000	39,045,000
1900	1,394,483,000	1,499,462,000	849,941,000	929,771,000	569,691,000	56,444,000

[1]*Commerce and Navigation of the United States, 1906*, p. 41.
[2]Excess of imports.

All of these various price records indicate that prices were abnormally high during the Civil War and for several years afterward, and that the high value of the imports and exports in 1866 was partly due to inflated prices. They show that there was some decline in American prices from 1867 to 1869 and of English prices to 1870; an increase of American prices from 1869 to 1872 and of English prices from 1870 to 1873; and a general fall from 1873 to 1879. In 1880 both English and American prices increased slightly, the former rising until 1882, but the latter immediately resumed the decline, which continued until 1887. Prices then underwent a slight recovery, but from 1891 to 1896 both American and British prices moved slowly downward. The closing years of the century again witnessed a rising level of prices.

Price fluctuations make it impossible to accept the value of imports and exports for all the years of this period as a true record of the trade movement. The value returns of the years 1870, 1880, 1890, and 1900

[1]*Wholesale Prices, Wages, and Transportation.* 4 parts. Report by Mr. Aldrich from the Committee on Finance. (Senate Doc. 1394, 52 Cong., 2 sess., March 3, 1893.)
[2]Sauerbeck (compiler). *The Course of Average Prices of General Commodities in England.* (London, 1908.)

may, however, be accepted as a conservative index of the actual increase which occurred. The index numbers of the Aldrich Committee and the United States Bureau of Labor show American price indices during these years of 117.3, 106.9, 112.9, and 110.5, respectively, and Sauerbeck's corresponding index numbers were 96, 88, 72, and 75. On the whole the average level of prices was higher during the first than the last half of the period 1865 to 1900, and statistics of value therefore do not overstate the increase in the volume of the foreign trade. The danger of being misled by price fluctuations may be readily avoided by ascertaining the quantities of the leading commodities exported and imported, and the volume of shipping required to handle the foreign trade.

During the period from the Civil War to the end of the nineteenth century the relations between imports and exports gradually changed. Although there had in various earlier years been an excess of exports, the usual condition was an excess of imports. From 1874 to 1900, however, the value of the exports of merchandise exceeded that of imports of merchandise in every year except in 1875, 1888, 1889, and 1893. The excess was subject to great variations, but it gradually increased in amount, reaching its highest point in 1898 with $615,000,000. After 1874 there was also an excess of total exports, including merchandise, gold, and silver, in every year except 1887 and 1888, its highest point being reached in 1900 with a total of $570,000,000. Meanwhile large sums of foreign capital were being invested in the United States, interest and dividends were paid on these investments, increased payments for freight services were made to foreign ship-owners, large sums were expended abroad by American tourists, immigrants were sending funds to friends and relatives in Europe, and growing sums were paid to foreign marine and fire insurance companies. The trade balance, however, as the term is generally used by importers and exporters, was in favor of the United States, the exports being permanently in excess of imports.

THE LEADING EXPORTS OF THE UNITED STATES.

In giving an account of the foreign trade of the United States from 1865 to 1900 it will not be necessary to set forth the causes which brought about the extraordinary commercial development that was characteristic of these thirty-five years. Chapters XV to XVII, Vol. I, state the facts as to the history of the internal commerce of the United States from the Civil War to the close of the nineteenth century and present the main facts as to the economic development, which carried with it not only the very rapid expansion of internal commerce, but also the unprecedented increase in the international trade of the United States.

As a consequence of the changes in production, there were several important modifications in the relative positions occupied by the commodities comprising the export trade of the United States during the

period from 1865 to 1900. Throughout the period as a whole, the chief item was the breadstuffs of the West. The expansion of the foreign grain trade had begun before the Civil War; and with the southern market temporarily closed during the years 1860 to 1865, wheat exports increased nine-fold. With the reopening of the southern market at the close of the war, grain exports declined for a time, but soon advanced again in consequence of the tremendous increase in grain production and of the enlarged European demand for breadstuffs.

In 1880, 180,304,000 bushels of wheat and 99,572,000 bushels of corn were shipped abroad. The value of all the exports of breadstuffs in 1880 was $288,037,000, as compared with cotton exports valued at $211,536,000. Wheat exports continued at a remarkably high level throughout the remainder of the century. The exports of wheat in 1899 amounted to 222,618,000 bushels and in 1900 to 186,096,000 bushels, or 34 per cent of the year's crop. In the latter year 54.9 per cent of wheat exports were shipped as grain and 45.1 per cent as flour, the proportion shipped as flour having gradually risen from an average of 22.5 per cent during the decade of 1871–1880. Corn exports also increased rapidly, rising from an annual average of 55,078,000 bushels or 4.6 per cent of the crop in the decade 1871–1880 to over 213,000,000 bushels or 10.3 per cent of the crop in 1900, this being the largest volume of corn ever shipped abroad in a single year. The value of all breadstuffs exported in the closing year of the century was $262,744,000 or $20,000,000 in excess of the value of cotton exports.

Cotton was a close rival of grain in the export trade, and at various times during this period it exceeded grain in value. The exports of cotton amounted to 2,923,000 bales in 1870 as compared with 3,535,000 bales in 1859, but by 1880 they had again increased to 4,453,000 bales, and 6,807,000 bales were exported in the fiscal year of 1900. Throughout the entire cotton-belt the increase of production was so rapid that cotton growers from 1890 to 1900 suffered from low prices. The export trade was their principal source of profit, 66.8 per cent of their crop being exported in 1900, and from 59.2 to 82.5 per cent of each annual crop during the entire period from 1865 to the close of the century.

Exports of meat and meat products, which had made but small beginnings before the Civil War, soon came to rank as third in importance among the exported commodities of the United States. Their value rose from $35,072,000 in the fiscal year 1865 to $113,769,000 in 1880 and $175,226,000 in 1900. The packing industries produced more than the home market would readily absorb and consequently large quantities of pork and beef products were shipped abroad. By 1880 pork products valued at $84,838,000 were exported, and by 1900 this trade had grown to $112,159,000. Beef exports were less important, for beef was better adapted to the American market and could readily

be sold at home, but exported beef products likewise advanced from a value of $10,323,000 in 1880 to $42,170,000 in 1900. The total foreign provision trade, including dairy products, grew from a value of $30,250,000 in 1870 to $129,887,000 in 1880 and $184,453,000 in 1900. Live animals, consisting chiefly of beef cattle, were also exported to an increasing extent, the value of the annual exports advancing from $1,045,000 in 1870 to $15,882,000 in 1880 and $43,585,000 in 1900.

During the latter half of the period iron and steel manufactures became a notable export. Before the war the annual value of iron and steel exports was less than $6,000,000, and as late as 1880 their value was less than $15,000,000. Thereafter, however, it began to increase, reaching a total of $25,542,000 in 1890 and $121,914,000 in 1900. The iron and steel products comprising this huge export trade included a large and constantly growing variety of manufactures, such as builders' hardware, locomotives and engines, rails, electrical machinery, wire, pipes, metal-working machinery, structural materials, boilers and plates, and even the finer wares, such as sewing machines, cash registers, and typewriters. Pig-iron exports valued at $3,125,000 were included in the iron and steel trade of the fiscal year 1900, but neither pig-iron nor iron ore were exported in large amounts. The exports of pig-iron in 1900, for instance, comprised but 160,690 tons out of a total production of 13,621,000 tons.

Refined mineral oil became the commodity of fifth importance among the domestic exports. In 1859 not a single gallon of mineral oil had been shipped abroad, but in 1870 the oil exports of the country were valued at $32,666,000, in 1890 at $51,403,000, and in 1900 at $75,612,000. In the last-mentioned year the exports of illuminating oil were valued at nearly $56,000,000, the remainder consisting of lubricating oil, heavy paraffin, and miscellaneous refined oils and by-products. The foreign trade was of vast importance to the petroleum industry, more than half of the total output of illuminating oil being exported in 1900.

During the decade 1890 to 1900 copper products became an important item in the export trade. As late as 1880 the copper exports were valued at less than $1,000,000, and from the Civil War to 1891 they ranged from $1,000,000 to $5,000,000 annually. They then grew from $7,226,000 in 1892 to $57,852,000 in 1900. This extraordinary growth was largely due to the rise of an urgent demand for copper throughout the world when electricity came into general use for motive-power and lighting purposes. Copper exports consisted largely of refined copper ingots, bars, and plates, such exports being valued at $55,772,000 in 1900. The remainder consisted of copper ore and miscellaneous copper manufactures.

The foreign lumber trade after 1880 was placed upon a firmer basis than it had occupied since colonial days. The export lumber move-

ment began before the Civil War, but the position which the trade had then attained was barely maintained until 1880. Then, chiefly because of the rise of the southern lumber industry, the foreign trade began to grow, the exports of lumber and timber gradually climbing from a value of $12,524,000 in 1880 to $39,366,000 in 1900. The total annual exports of wood and wood manufactures during the same period grew from $16,237,000 to $50,598,000. At the same time appreciable gains were made in the exportation of minor forest products. The exports of naval stores advanced from a value of $4,585,000 in 1880 to $12,474,000 in 1900.

TABLE 56.—*Domestic exports grouped according to sources of production, five-year periods, 1865-1900.*[1]

Year.	Agriculture.		Manufactures.		Mining.	
	Value.	Per cent.	Value.	Per cent.	Value.	Per cent.
	dollars.		*dollars.*		*dollars.*	
1865	156,663,000	60.46	59,037,000	22.78	10,792,000	4.17
1870	361,188,000	79.35	68,280,000	15.00	5,026,000	1.10
1875	430,307,000	76.95	92,679,000	16.57	6,469,000	1.15
1880	685,961,000	83.25	102,856,000	12.48	5,863,000	.71
1885	530,173,000	72.96	147,188,000	20.25	15,798,000	2.18
1890	629,821,000	74.51	151,102,000	17.87	22,298,000	2.64
1895	553,210,000	69.73	183,596,000	23.14	18,510,000	2.33
1900	835,858,000	60.98	433,852,000	31.65	37,844,000	2.76

Year.	Forest.		Fisheries.		Miscellaneous.		Total value.
	Value.	Per cent.	Value.	Per cent.	Value.	Per cent.	
	dollars.		*dollars.*		*dollars.*		*dollars.*
1865	14,858,000	5.73	4,795,000	1.85	12,981,000	5.01	259,125,000
1870	14,898,000	3.27	2,836,000	.62	2,981,000	.66	455,208,000
1875	19,166,000	3.43	4,875,000	.87	5,743,000	1.03	559,238,000
1880	17,321,000	2.11	5,255,000	.64	6,689,000	.81	823,946,000
1885	22,015,000	3.03	5,955,000	.82	5,555,000	.76	726,683,000
1890	29,473,000	3.49	7,458,000	.88	5,141,000	.61	845,294,000
1895	28,576,000	3.61	5,329,000	.67	4,172,000	.52	793,393,000
1900	52,218,000	3.81	6,327,000	.46	4,665,000	.34	1,370,764,000

[1] U. S. Bureau of Statistics, "Exports of Manufactures from the U. S. and Their Distribution, 1790–1902," from *Monthly Summary of Commerce and Finance, April 1903*, p. 3249.

During the latter half of the period from 1865 to the close of the nineteenth century, various other exports became of importance, but as it was only during the last decade (1890 to 1900) that they advanced with marked rapidity, they are more appropriately regarded as special features of the trade of the twentieth century. In 1900 leather and leather goods were exported to the value of $27,293,000; cotton manufactures, $24,003,000; coal, $19,503,000; oil-cake and oil-cake meal, $16,758,000; vegetable oils, $16,345,000; agricultural implements, $16,099,000; and chemicals, drugs, etc., $13,203,000.

Throughout the period from the Civil War to 1900, the export trade depended chiefly upon agricultural products, including in that group of

exports flour, meal, glucose, cotton-seed oil, butter, cheese, and similar semi-agricultural commodities. (See table 56.) Of the country's entire exports 79.4 per cent consisted of farm products in 1870; 83.3 per cent in 1880; 74.5 per cent in 1890; and 60.9 per cent in 1900. These proportions, which are based upon the total value of the export trade, are somewhat lower than in the trade period immediately before the Civil War (1815–1860), when they never fell below 75 per cent of the total and usually exceeded 80 per cent. It is notable, however, that, though farm products continued to be of greater value in the export trade, their relative position was gradually lowered by the rise in the exports of manufactures, minerals, and forest products. During the last decade of the century, the ratio of the value of agricultural products to the total value of our exports fell from 74.5 per cent to 60.9 per cent, although the value of farm exports increased from $629,821,000 to $835,858,000.

The exports of domestic manufactures, including such articles as refined copper and refined petroleum, as well as finished manufactured products, though of less value during this period than farm products, increased more rapidly during the last two decades of the century than any other group of exports, gradually rising in value from $102,856,000 in 1880 to $433,852,000 in 1900. In the former year they comprised 12.4 per cent and in the latter year 31.7 per cent of the total exports of the country.

The exports of forest products rose in value from $17,321,000 in 1880 to $52,218,000 in 1900, or from 2.1 per cent to 3.8 per cent of the total, and during the same two decades the annual foreign shipments of crude minerals rose from $5,863,000 to $37,844,000, or from 0.7 per cent to 2.8 per cent of the total export trade.

The exports of fish and fish products gradually declined in relative importance, although their total value slowly increased. The whale fisheries had reached their climax in the fifties, and by the end of the nineteenth century they were but a shadow of what they had previously been. The cod and other Atlantic coast fisheries remained an important industry, but their output was barely sufficient to supply the American market with fresh fish. The increase in fish exports was mainly in the salmon fisheries of the Pacific coast. These fisheries became important during this period and, a sufficient local market not being available, large quantities of their products were shipped abroad as well as to the domestic markets of the central West and Atlantic States.

DOMESTIC EXPORTS CLASSIFIED ACCORDING TO USES.

It is instructive to classify domestic exports according to their uses. Such a classification shows (table 57) that exports of crude foodstuffs and food animals increased from a value of $41,852,000 in 1870 to

$266,108,000 in 1880 and $227,347,000 in 1900. Relative to the total exports of the country this group occupied its highest position in 1880, when it comprised 32.3 per cent of the total. From then until the end of the century there was a general tendency to export flour rather than wheat, and this change, together with the rapid growth of the exports of manufactured, mineral, and forest products, caused the proportion of this group to decline slowly to 16.6 per cent in 1900.

TABLE 57.—*Domestic exports grouped according to their uses, five year periods, 1865-1900.*[1]

Year.	Foodstuffs in crude condition and food animals.		Foodstuffs partly or wholly manufactured.		Crude materials for use in manufacturing.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	dollars.		*dollars.*		*dollars.*	
1865	13,975,000	10.20	47,981,000	35.04	33,852,000	24.71
1870	41,852,000	11.12	50,919,000	13.53	213,440,000	56.64
1875	79,078,000	15.84	110,292,000	22.09	206,272,000	41.31
1880	266,108,000	32.30	193,353,000	23.47	238,788,000	28.98
1885	123,327,000	16.97	201,800,000	27.77	248,611,000	34.22
1890	132,073,000	15.62	224,756,000	26.59	304,567,000	36.03
1895	99,051,000	12.49	219,125,000	27.62	264,195,000	33.30
1900	227,347,000	16.59	318,127,000	23.28	325,589,000	23.75

Year.	Manufactures for further use in manufacturing.		Manufactures ready for consumption.		Miscellaneous.		Total value.
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.	
	dollars.		*dollars.*		*dollars.*		*dollars.*
1865	10,650,000	7.79	30,121,000	22.00	361,000	.26	136,940,000
1870	13,712,000	3.66	56,329,000	14.96	363,000	.09	376,616,000
1875	27,458,000	5.50	74,503,000	14.92	1,680,000	.34	499,284,000
1880	29,044,000	3.52	92,774,000	11.26	3,878,000	.47	823,946,000
1885	39,437,000	5.42	110,819,000	15.25	2,689,000	.37	726,683,000
1890	46,455,000	5.50	132,527,000	15.68	4,915,000	.58	845,294,000
1895	61,813,000	7.78	143,245,000	18.06	5,963,000	.75	793,393,000
1900	152,891,000	11.15	331,956,000	24.15	14,855,000	1.08	1,370,764,000

[1] U. S. Bureau of Statistics. *Exports of Manufactures from the United States and Their Distribution. 1800–1906*, p. 27.

A second group of exports consisted of foodstuffs partly or wholly manufactured, the value of which rose from $50,919,000 in 1870 to $193,353,000 in 1880 and $318,127,000 in 1900. Omitting from consideration the year 1865, which like other Civil War years was abnormal, the relative position of this group of exports slowly improved. In 1900 it comprised 23.2 per cent of the total value of domestic exports.

Exports of manufactures for further use in manufacturing advanced from $13,712,000 or 3.7 per cent of the total in 1870 to $152,891,000 or 11.2 per cent of the total in 1900; and exports of manufactures ready

for consumption were in the same years valued at $56,329,000 or 14.9 per cent and $331,956,000 or 24.2 per cent respectively. By combining the last two groups it is seen that there was a growth in the proportion of exports of all manufactures from 18.6 per cent in 1870 and 14.8 per cent in 1880 to 35.3 per cent in 1900.[1] The group of exports which, with the exception of the last few years, was largest throughout the period from the Civil War to the end of the century comprised crude materials for use in manufacturing. Its aggregate value advanced from $213,440,000 in 1870 to $325,589,000 in 1900. Its relative proportion was highest during the five years prior to 1870, when from 49.2 per cent to 67.4 per cent of all exports consisted of such materials. During the last decade of the century this group of exports still comprised from 23.7 per cent to 39.7 per cent of the total export trade.

THE GROWTH OF FOREIGN MARKETS.

Two striking facts relative to the foreign markets for American exports since the Civil War are noteworthy—the predominant importance of the established European markets and the relatively greater progress made during the last decade of the century in the newer markets of the world. During the Civil War, largely because of the declining trade with England, the European proportion of the total export trade fell from 77.5 per cent in 1860 to 59.9 per cent in 1865, but in 1866 it immediately rebounded to 81 per cent. From then until the closing decade, the proportion of the total exports marketed in Europe remained at a remarkably high level, ranging annually from 74.7 per cent to 86.1 per cent. The importance of the European market was greatest during the eighties, when the foreign grain trade was at its height, but in 1900 Europe still purchased 74.6 per cent of the country's total exports. The countries of Europe constituted the natural market for the surplus breadstuffs, cotton, meat products, beef cattle, leaf tobacco, mineral oil, lumber, and copper of the United States; and, for a time, it was not difficult for American exporters to sell iron and steel manufactures of many kinds in Europe.

America's greatest market was the United Kingdom. No sooner was peace between the North and South declared in 1865 than the British trade rose even higher than the exceptional position it had reached immediately before the war. By 1870 the trade of the United States with Great Britain had become highly prosperous, and it continued at a high tide even during the industrial depression of 1873. Though there were numerous fluctuations, the exports from the United States to the British market maintained a high level throughout the remainder of the century. They were valued at $451,000,000 in 1880; $444,500,000 in 1890; $527,700,000 in 1900.

[1]These proportions differ slightly from the proportions given on page 69 in that they include certain items not included in the former definition of manufactures. Both classifications are taken from the reports of the United States Bureau of Statistics.

American exports to the countries of northern Europe were likewise large in volume. In spite of the protective tariff wall which Germany erected against many American products, the imports into Germany of American cotton, breadstuffs, copper, petroleum, lumber, tobacco, oil-cake, and cotton-seed oil continued to increase almost without interruption. American cotton goods, machinery, and other iron and steel goods also found a German market; and though tariff duties and trade regulations effectively restricted the imports of beef cattle and dressed meats, the German market accepted increased shipments of American meat products. American agricultural exports were expressly granted the conventional German tariff schedule under the agreements of 1892 and 1900. In 1880 when the export trade was in the midst of the first great period of expansion subsequent to the Civil War, the exports of domestic merchandise to the German Empire were valued at $50,292,000, and they gradually increased to $184,648,000 in 1900.

With the exception of Russia, there was gratifying progress in the exports of the United States to all the other countries of northern Europe. Domestic exports to the Netherlands increased from $16,800,000 in 1880 to $89,116,000 in 1900, and those to Belgium from $33,715,000 to $47,756,000. Both of these countries imported more foreign wares than were needed for home consumption, and distributed them throughout the interior of Europe. The domestic exports to Austria-Hungary grew from $2,304,000 in 1880 to $16,826,000 in 1900; those to Denmark from $3,477,000 to $18,469,000; and those to Norway and Sweden from $2,365,000 to $10,432,000.

In contrast with the increasing export trade of the United States with the United Kingdom and northern Europe, the commerce with the countries of southern Europe was not in a prosperous condition. Immediately after the Civil War trade with southern Europe rebounded to a level higher than it had occupied in 1860, but thereafter it made little progress. The exports of domestic merchandise to France in 1880 were valued at $98,800,000 as compared with $81,994,000 in 1900, and their value was considerably less throughout most of the intervening years. In 1880, likewise, the domestic exports to Spain were valued at $14,600,000 and those to Portugal at $14,500,000, while in the closing year of the century they were valued at $13,385,000 and $5,886,600 respectively. Of the important southern European nations, Italy alone imported increasing quantities of American products, the exports to that country rising from $12,348,000 in 1880 to $33,059,000 in 1900.

The export trade with southern Europe lagged chiefly because that portion of Europe was not in a prosperous condition. Spain and Portugal in particular were industrially and commercially backward. The countries of southern Europe, moreover, maintained high tariff duties upon imports. France raised her import duties on wheat in

1885, and in 1892 adopted a maximum and minimum tariff, the maximum schedule being applied to all American products except a small number of minor importance which were exempted under the agreement of 1898. Spain, likewise, adopted the French dual tariff system and imposed the maximum rates upon American products. Portugal and Italy applied the maximum schedule to all American wares except a few specified in the agreements of 1900, the very close of the trade era under consideration.

When during the last twenty years of the nineteenth century, American manufacturing interests began seriously the work of developing a foreign market, the trade for exports was extended over a wider area. Europe, by purchasing most of the surplus of agricultural products and raw materials, continued to lead in the foreign trade of the United States, but after 1890 the European proportion of the total exports of the United States slowly declined. American products had been shipped to distant countries even before the beginning of the nineteenth century, but the primary purpose of that trade had been to obtain valuable cargoes of imports. The time had now come when American exporters sought these countries primarily as markets for American manufactures.

The value of the exports from the United States to the several continents of the world and the proportion of the total shipped to each are shown in table 58 Among the leading individual countries which imported growing volumes of American goods were Canada, Mexico, Argentina, South Africa, Japan, China, and British Australasia. As the central and western farming regions of Canada were opened, as transportation connections were improved, and the Hudson Bay Company lost its grip upon the undeveloped sections of that country, domestic exports from the United States to Canada slowly but irregularly grew from $39,508,000 in 1870 to $88,030,000 in 1900. After the Civil War the Mexican trade was sluggish for thirty years, but after 1895 it began to prosper, domestic exports to Mexico advancing from $14,582,000 in that year to $33,704,000 in 1900. The total export trade with foreign North America, as a whole, grew from $68,962,000 in 1870 to $187,595,000 in 1900, but its importance relative to the export trade with all countries remained substantially unchanged, because the activity of the Canadian trade was counterbalanced by long-extended depression in the trade with the West Indies and Central America.

Except in the case of the trade with Argentina, which became unusually active during the last decade of the century, the commerce of the United States with the countries of South America made little or no progress during this period. The exports to Argentina advanced in value from $8,320,000 in 1890 to $11,263,000 in 1900, and the foundation was laid for the rapid progress made in the commerce with that country since 1900. Trade with Brazil languished, however, the ex-

ports from the United States to the Brazilian markets actually declining during the closing decade of the century, and the trade with other countries of South America remained in an apathetic condition.

TABLE 58.—*Exports of merchandise from the United States, by continents, 1865-1900.*[1]

Year.	Europe.		North America.		South America.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	dollars.		*dollars.*		*dollars.*	
1865.........	201,758,000	59.92	94,838,000	28.17	21,607,000	6.42
1866.........	458,310,000	81.05	67,332,000	11.91	17,924,000	3.17
1870.........	420,184,000	79.35	68,962,000	13.03	21,651,000	4.09
1875.........	533,545,000	80.17	86,166,000	12.95	24,097,000	3.62
1880.........	719,434,000	86.10	69,438,000	8.31	23,190,000	2.77
1885.........	599,241,000	80.75	76,765,000	10.34	27,735,000	3.74
1890.........	683,736,000	79.74	94,100,000	10.98	38,753,000	4.52
1895.........	627,928,000	77.76	108,576,000	13.45	33,526,000	4.15
1900.........	1,040,168,000	74.60	187,595,000	13.45	38,946,000	2.79

Year.	Asia.		Oceania.		Africa.		Total value.	Per capita.
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.		
	dollars.		*dollars.*		*dollars.*		*dollars.*	*dollars.*
1865	8,530,000	2.53	7,552,000	2.24	2,412,000	0.72	336,697,000	4.78
1866	11,799,000	2.09	7,675,000	1.36	2,385,000	.42	565,425,000	9.84
1870	10,972,000	2.07	4,335,000	.82	3,415,000	.64	529,519,000	9.77
1875	13,972,000	2.10	4,277,000	.64	3,471,000	.52	665,528,000	11.36
1880	11,646,000	1.39	6,847,000	.82	5,084,000	.61	835,639,000	16.43
1885	20,740,000	2.79	13,605,000	1.83	4,104,000	.55	742,190,000	12.94
1890	19,697,000	2.30	16,460,000	1.92	5,082,000	.54	857,829,000	13.50
1895	17,325,000	2.15	13,109,000	1.62	7,075,000	.87	807,538,000	11.51
1900	64,914,000	4.66	43,391,000	3.11	19,470,000	1.79	1,394,483,000	17.96

[1]U. S. Bureau of Statistics, *Analysis of the Foreign Trade of the United States, 1895–1905*, p. 139.

After 1868, when the feudal system was abolished in Japan, the exports to that country advanced with unusual rapidity. From less than $90,000 in 1860, their annual value leaped to $2,526,000 in 1880 and to $29,043,000 in 1900, the commodities sold consisting chiefly of cotton, oil, flour, tobacco, provisions, and iron and steel products of many kinds which were used in building up the industries of Japan. The export trade with China, which had suddenly risen shortly after the treaty of 1842, fluctuated irregularly until after the Japanese treaty of 1895. It then increased from $3,603,000 in that year to $15,213,000 in 1900. During the sixties, moreover, in addition to the exportation of merchandise to the Far East, there began the shipment of large quantities of specie. A "trade dollar" expressly designed for the Oriental trade was coined in the United States. It contained three-fourths

of a grain more silver than the Mexican dollar which circulated widely in the Far East, and it was successfully introduced into China, being made legal tender at various treaty ports. Its coinage was discontinued in 1877, and since then it has been coined on but few occasions. In 1887, $7,689,000 were redeemed, but practically all of the remainder of the 35,965,924 trade dollars are still in circulation in the Orient.

The commerce of South Africa increased somewhat after the diamond discoveries of 1867. The gold discoveries of 1869 caused a still larger demand in South Africa for imported commodities, but the trade was largely controlled by British merchants. The Anglo-Boer war, however, by creating a market for American horses, mules, and provisions, caused a sudden rise in the exports from the United States to British Africa from a value of $5,191,000 in 1895 to $11,289,000 in 1896. Having once obtained a foothold, American exports continued to increase, a South African market being found for mining, railroad, and farming machinery, structural iron and steel and hardware, flour and provisions, liquors, petroleum, lumber, and wood manufactures. The exports to British Africa in 1900 were valued at $16,256,000.[1]

British Australasia, including Australia, Tasmania, and New Zealand, after passing through a gold-mining excitement, returned to agricultural and pastoral activities during the years 1860 to 1872, and then began to develop industrially. American exports to Australia grew slowly from $3,420,000 in 1870 to $11,168,000 in 1890; then they progressed more rapidly, reaching a total of $26,584,000 in 1900. The old trade in breadstuffs and provisions, which arose during the mining boom from 1851 to 1860, was displaced by a more permanent trade in iron and steel manufactures, farm machinery, leather goods, lumber, paper, drugs, cotton textiles, furniture, and glassware.

VALUE BY GROUPS OF THE LEADING IMPORTS OF THE UNITED STATES.

Before the Civil War the principal group of imports had uniformly been manufactured wares; they had comprised over 70 per cent of the value of all imports in 1850 and 63.2 per cent in 1860, 56.5 per cent consisting of manufactures for consumption and 6.7 per cent of manufactures intended for further use in American industries. The proportion of finished manufactures declined during the war, and as American industries gradually grew and protective tariff duties were maintained after the return of peace, it not only failed to recover, but continued to decline throughout the remainder of the century. From 39.8 per cent in 1870 the proportion fell to 29.2 per cent in 1890 and to 23.9 per cent in 1900. The value of the imports of finished manufactured wares in 1900 was $203,126,000, or much in excess of what it had been before the Civil War, but less than it had been during many years between 1870 and 1899. The imports of manufactures intended for further use

[1] British South African exports not separately stated until 1902.

in American industries, such as certain chemicals, unset diamonds, lumber and hewn timber, tin in pigs and bars, and certain grades of iron and steel, increased in value from $55,569,000 in 1870 to $134,222,000 in 1900, or from 12.7 per cent to 15.8 per cent of the total imports. These commodities were, for the most part, on a different footing than finished manufactures, in that they served as raw materials for American industries.

TABLE 59.—*Imports into the United States grouped according to their uses, 1865–1900.*[1]

Year.	Foodstuffs in crude condition, and food animals.		Food stuffs partly or wholly manufactured.		Crude materials for use in manufacturing.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	dollars.		*dollars.*		*dollars.*	
1865....	35,137,000	14.72	48,030,000	20.12	28,777,000	12.05
1866....	60,669,000	13.95	72,482,000	16.67	46,114,000	10.61
1870....	54,081,000	12.41	96,082,000	22.03	55,615,000	12.76
1875....	90,018,000	16.89	113,146,000	21.23	78,892,000	14.80
1880....	100,297,000	15.01	118,125,000	17.69	131,861,000	19.74
1885....	93,346,000	16.16	102,938,000	17.82	106,775,000	18.49
1890....	128,480,000	16.28	133,332,000	16.89	170,637,000	21.62
1895....	141,377,000	19.31	107,026,000	14.63	180,940,000	24.72
1900....	97,916,000	11.52	133,027,000	15.65	276,241,000	32.50

Year.	Manufactures for further use in manufacturing.		Manufactures ready for consumption.		Miscellaneous.		Total value.
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.	
	dollars.		*dollars.*		*dollars.*		*dollars.*
1865	29,902,000	12.52	96,138,000	40.27	760,000	0.32	238,746,000
1866	55,840,000	12.84	198,128,000	45.57	1,577,000	.36	434,812,000
1870	55,569,000	12.75	173,615,000	39.82	996,000	.23	435,958,000
1875	63,411,000	11.89	177,891,000	33.38	9,645,000	1.81	533,005,000
1880	110,779,000	16.59	196,587,000	29.43	10,304,000	1.54	667,954,000
1885	78,255,000	13.55	182,543,000	31.61	13,672,000	2.37	577,527,000
1890	116,924,000	14.81	230,686,000	29.23	9,251,000	1.17	789,310,000
1895	96,487,000	13.18	199,543,000	27.26	6,597,000	.90	731,970,000
1900	134,222,000	15.79	203,126,000	23.90	5,408,000	.64	849,941,000

[1]U. S. Bureau of Statistics, *Exports of Manufactures from the United States and Their Distribution, 1800–1906*, p. 26.

A group of imports which remained important throughout the period from 1865 to 1900 was that of foodstuffs in crude condition, such as coffee, tea, cocoa, fruits, and nuts. Their value grew from $54,081,000 in 1870 to $97,916,000 in 1900, and during the later eighties and early nineties their value ranged from $106,000,000 to $175,500,000 annually. Their relative position fluctuated from 12.4 per cent of the total imports in 1870 to 21.2 per cent in 1892 and 11.5 per cent in 1900. Imports of

foodstuffs partly or wholly manufactured, such as sugar, dried fruits, liquors, wines, and spirits, although greater in value than raw foodstuffs, gradually declined from 22 per cent of the total import trade in 1870 to 15.7 per cent in 1900. Their annual value was subject to great fluctuations. In 1870 it was $96,082,000 and in 1900, $133,027,000, but there were many years during the eighties and nineties when it was equal to or greater than the value attained in 1900.

The leading group of imports and the one which advanced with greatest rapidity was that comprising crude materials for use in American industries, such as india-rubber, wool, hides and skins, raw silk, fibers, and uncut diamonds. (See table 59.) The annual value of the imports comprising this group steadily grew from $55,615,000, or 12.7 per cent of the total, in 1870, to $276,241,000, or 32.5 per cent of the total, in 1900.

The leading single import was sugar, its annual value advancing from $55,655,000 in 1870 to $100,251,000 in 1900. During the same years the value of imported hides and skins grew from $14,402,000 to $57,940,000; chemicals, drugs, etc., from $21,362,000 to $53,705,000; coffee from $24,234,000 to $52,468,000; raw silk from $3,018,000 to $41,296,000; cotton goods from $23,380,000 to $41,296,000; india-rubber from $3,460,000 to $37,793,000; fiber manufactures from $23,904,000 to $30,894,000; and silk manufactures from $23,904,000 to $30,894,000. The remaining imports of chief importance at the close of the century were as follows, in the order of value: raw fibers, lumber and wood manufactures, iron and steel manufactures, raw wool, fruits and nuts, tin, precious stones and jewelry, woolen goods, leaf tobacco, leather and leather goods, spirits, malt liquors and wines, furs and fur goods, tea, earthen, stone, and china ware, fish and vegetable oils. All of these imports gradually increased, with the exception of iron and steel wares, woolen goods, and tea. Some of the greatest gains were made in those commodities which were produced in tropical and subtropical countries, the value of such imports in 1900 reaching a total of $325,000,000.

SOURCES OF THE IMPORTS INTO THE UNITED STATES.

The established markets of Europe were throughout this commercial period the principal source of the import trade of the United States, though these markets did not occupy as important a position in the import as in the export trade. In some of the years of the decade preceding the Civil War the imports received from Europe constituted as much as 71 per cent of the total amount of imports, and after the war, in 1866, they still comprised 60.8 per cent of the total. When, however, the basis of the import trade began to shift from manufactured wares to raw materials and foodstuffs, this proportion began to

decline. While in 1900 European countries purchased 74.6 per cent of the total exports of the nation, they supplied but 51.8 per cent of its imports, although the total value of the imports received from Europe slowly increased from $249,540,000 in 1870 to $440,567,000 in 1900.

This increase was confined to the countries of continental Europe. The imports from the United Kingdom, although greater than from any other single country, actually rose but slightly from $155,044,000 in 1870 and $249,324,000 in 1872 to $159,500,000 in 1900. The shipments of British cotton, woolen, and linen goods, tin plates, iron and steel wares, and miscellaneous manufactures were confronted by high tariff barriers and by the growth of competing American industries. England was, of course, a broker nation, collecting wares of all kinds from the remote corners of the world and redistributing them. The shipments of diamonds and precious stones, tropical cabinet-woods, ivory, etc., which were received from England gradually increased, but the enlarged volume of this indirect trade was not sufficient to offset the decline in the imports of articles manufactured in Great Britain.

The imports received from northern continental Europe were not as great as those received from the British Isles, but they held a distinctive position in that they almost uniformly increased. The Continent found an American market for a wide variety of wares. The commodities imported from Germany included cotton goods, beet sugar, chemicals and coal tar, machinery, leather and glass manufactures, woolen and silk goods, books, earthenware, cutlery, furs, hides and skins, and a large variety of miscellaneous manufactures. Holland found an American market for diamonds and tobacco, fish, hides and skins, and tin; Norway and Sweden, for fish, hides and skins, iron, and wood pulp; Belgium, for rubber, glass and glassware, diamonds, beet sugar, firearms, furs, chemicals, cement, and fiber manufactures; Denmark, for hides and skins, wool, and similar products; Austria-Hungary, for beet sugar, cotton goods, chemicals, textile fibers, glass and glassware, jewelry, and hides and skins; and Russia no longer exported to the United States chiefly hemp and cordage, but also such articles as hides and skins, wool, licorice root, and manganese.

Almost without exception the imports from these nations reached a higher level immediately after the Civil War than they had occupied before, and then with irregular fluctuations continued to advance. The imports from Germany during these twenty years rose from $52,211,000 in 1880 to $97,374,000 in 1900; those from Holland advanced from $6,944,000 to $15,852,000; Belgium, from $11,791,000 to $12,940,000; Denmark, from $180,200 to $920,000; Norway and Sweden, from $688,900 to $4,244,000; Austria-Hungary, from $1,555,000 to $9,079,000; and those from Russia advanced from $673,900 to $7,245,000.

The imports from southern Europe to the United States also grew in volume throughout this entire period, advancing along with the exports from the United States to that section until 1880, and continuing to increase thereafter, notwithstanding the downward trend of the export trade. In 1880 the imports from France were valued at $69,344,000, and by 1900, though frequently less in value during intervening years, they had risen to $73,012,000. During the same period the imports from Spain grew from $5,052,000 to $5,950,000, Portugal from $770,000 to $3,743,000, and Italy from $10,317,000

TABLE 60.—*Imports into the United States of merchandise by continents, 1865–1900.*[1]

Year.	Europe.		North America.		South America.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	dollars.		*dollars.*		*dollars.*	
1865	109,603,000	46.75	83,912,000	35.80	22,931,000	9.79
1866	266,266,000	60.84	109,989,000	25.13	32,137,000	7.34
1870	249,540,000	53.98	126,545,000	27.42	43,596,000	9.41
1875	287,201,000	51.85	132,035,000	23.84	74,247,000	13.40
1880	370,822,000	55.52	130,077,000	19.47	82,127,000	12.30
1885	318,733,000	55.19	117,451,000	20.34	65,290,000	11.31
1890	449,987,000	57.14	148,369,000	18.84	90,006,000	11.43
1895	383,646,000	52.41	133,916,000	18.29	112,167,000	15.32
1900	440,567,000	51.84	130,035,000	15.30	93,667,000	11.02

Year.	Asia.		Oceania.		Africa.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	dollars.		*dollars.*		*dollars.*	
1865	11,248,000	4.79	3,572,000	1.52	3,166,000	1.35
1866	19,219,000	4.39	7,411,000	1.70	2,618,000	.60
1870	31,413,000	6.78	1,423,000	.31	9,860,000	2.10
1875	45,220,000	8.16	4,982,000	.90	10,219,000	1.85
1880	67,009,000	10.02	14,130,000	2.13	3,789,000	.56
1885	52,200,000	9.04	19,471,000	3.37	4,382,000	.75
1890	67,507,000	8.57	28,356,000	3.60	5,085,000	.42
1895	77,626,000	10.61	17,451,000	2.39	7,164,000	.98
1900	139,842,000	16.45	34,611,000	4.07	11,218,000	1.32

[1]U. S. Bureau of Statistics, *Analysis of the Foreign Trade of the U. S. 1895–1905*, p. 138.

to $27,924,000. South European silks, fruits, wines and spirits, laces, jewelry, argols, sulphur, glycerine and chemicals, cotton and woolen goods, furs, leather, gloves, cork, india-rubber, feathers and downs, earthenware, works of art, and ornaments sought and found an American market. The principal obstacle to the entrance of greater quantities of these wares was the high tariff duties, which, with the exception of a few years, were imposed throughout this period.[1]

[1]For reciprocal agreements see chap. xii.

The countries of the non-European world in 1900 provided somewhat less than one-half of the total imports entering the United States (48.2 per cent), and their share was very slowly increasing. The imports from many of these countries, consisting mainly of raw materials and tropical and subtropical foodstuffs, were not so generally confronted with hostile American industries and prohibitive tariffs. The progress made, however, was far from universal and was not free from the effects of home competition, high tariffs, and other obstacles to import trade.

From table 60 it is seen that the total volume of imports from each of the non-European continents gradually increased after the close of the Civil War. Relative to the total imports of the country, however, the share received from all North American countries combined was less in 1900 than immediately before or after the war; the proportion coming from South America was no greater in the last decade of the century than during the seventies; and the imports received from Africa were less during the closing decade than during the years 1870 to 1880. The imports from Asia, on the contrary, advanced from 6.8 per cent of the total in 1870 to 16.5 per cent in 1900, and those from Australasia during the same years grew from less than 1 per cent to 4 per cent of the total.

The gains were chiefly in the imports from a few individual countries. Noteworthy increases occurred in the imports from Canada, and during the last decade of the century in the imports from Mexico, in those from Japan, China, Hongkong and the British and Dutch East Indies, Australia and New Zealand, Egypt, and Argentina and Chile.

WIDENED BASIS OF AMERICAN FOREIGN TRADE.

The period 1865 to 1900 was noteworthy not only for the expansion in the variety and volume of imports and exports, for the multiplication of the sources of imports, and for widening the range of foreign markets, but also for the expansion within the United States of the geographical basis of the foreign trade. Before the Civil War the chief source of domestic exports and the leading markets for imports were the regions along the Atlantic and Gulf coasts and the eastern part of the Mississippi Valley, but during this period, as population and industry moved westward, the sources of the foreign trade gradually extended across the entire continent. The acquisition of Hawaii, the Philippines, and Porto Rico opened new regions of American industry and trade even beyond the mainland of the United States, but this occurred so shortly before the close of the century that its effects did not become of appreciable importance until later.

The imports continued to come into the country largely through the ports of the North Atlantic seaboard, but the origin of the import trade had been extended over such a wide area that these ports declined in

rank to some extent. Though the port of New York no longer handled 70 per cent of the country's entire import trade, as in 1860, the value of the imports of merchandise entering that port grew from $281,000,000 in 1870 to $537,237,000 in 1900, and at the close of the century still comprised 63.2 per cent of the total. It was from New York that the chief ocean lines continued to radiate to the older as well as the newer markets of the world, bringing to this port a great variety of imported commodities for distribution throughout the country.

The remaining 36.8 per cent of the import trade was divided among a large number of ports. Two other North Atlantic ports, Boston and Philadelphia, handled increased quantities of imports during the years 1865 to 1900, those of Boston amounting in value to $72,195,000 and those of Philadelphia to $51,866,000 in the last year of the century, or more than those of any other port of entry except New York.

On the South Atlantic seaboard a readjustment occurred after the Civil War. For a short time the import trade of Baltimore was greater than it had formerly been, but after 1877 it made no further progress during the remainder of the century. The trade of Charleston was severely crippled during the war, and when the center of the cotton-belt later moved westward, her import trade never recovered. In 1900 but $1,125,000 worth of imported wares entered Charleston. The imports of Norfolk and Richmond likewise declined to a mere trifle, and those of Newport News and Savannah, though not declining, remained small.

New Orleans continued to be the leading port of importation on the Gulf, but the volume of imports handled was no greater than during the decade preceding the Civil War; indeed, its value was less in 1900 than in 1860. The imports entering Galveston, Mobile, and Pensacola were irregular and small in amount. The import trade of all the Gulf ports was sluggish and barely maintained the position attained before the Civil War; its total value in 1900 was $23,693,000, but 3.3 per cent of the total.

The import trade conducted at the ports of the Pacific coast, though far less valuable than that of the North Atlantic seaboard, was equally flourishing. In 1860 it amounted to but $7,372,000, but it began to advance immediately after the war, gradually rising from $16,241,000 in 1870 to $58,916,000 (or 7.1 per cent of the total imports of merchandise) in 1900. San Francisco became fourth in rank as an importing center, and appreciable gains were made at the Puget Sound ports and at Portland, Oregon. Growing quantities of imports likewise entered through the ports of the Great Lakes and the northern border. While this trade had scarcely begun before the war, it reached the sum of $59,948,000 in 1900. Smaller but increasing quantities of imports entered at interior ports of entry and at the ports along the Mexican border.

In the export trade there was a redistribution of commerce among the various ports of shipment. As compared with 81.5 per cent of the total import trade in merchandise, the ports of the Atlantic coast in 1900 handled but 69.1 per cent of the total exports of merchandise. The exports of these ports advanced rapidly from $293,440,000 in 1870 to $963,569,000 in 1900, but meanwhile the export trade was also growing at many other ports. New York obtained an even greater lead over any other single port than it had before the Civil War, its exports advancing from $196,615,000 in 1870 to $518,834,000 (or 37.2 per cent of the entire export trade of the country) in 1900. In addition to the increase in the production of agricultural and other raw materials, the rise of manufactures as exports caused an unusual flow of commodities to the port of New York, from which the leading steamship lines conducted a service to all the principal markets of the world. The position of New York, however, was less dominant in the export trade than in the import trade.

Substantial progress was made in the export trade conducted at Boston, Philadelphia, and Baltimore, the long-standing rivals of New York. Various South Atlantic ports also became large ports of export, notably Savannah and Newport News, and smaller but increasing quantities of exports were shipped from Norfolk (Virginia), Wilmington (North Carolina), and Brunswick (Georgia). The export trade of Charleston fell almost as rapidly as the import trade, and that city soon lost precedence over the other South Atlantic ports in both branches of foreign trade.

The Gulf ports handled 18.3 per cent of the total export trade of the country at the close of the century, their shipments rising from a value of $146,020,000 in 1870 to $234,108,000 in 1900. The most rapid progress was made at the port of Galveston, Texas, which before the Civil War was scarcely known. The westward movement of cotton culture gave to this port a cotton trade which during the last decade of the century was barely exceeded by that of New Orleans, and its total export trade advanced from $14,874,000 in 1870 to $85,658,000 in 1900. Meanwhile, the exports of New Orleans, though increasing less rapidly than those of Galveston, grew from $107,500,000 to $115,859,000, retaining for New Orleans second place as an American port of exportation.

The northern border and Great Lake ports made far greater progress in the export than in the import trade, the value of their exports growing from $15,043,000 in 1870 to $104,267,000 in 1900. The export trade of the Pacific coast at the same time advanced from $14,647,000 to $170,173,000, 55.9 per cent being conducted at San Francisco in 1900, 24.8 per cent at Puget Sound ports, and 11.4 per cent at Portland. The exports shipped directly across the Mexican border likewise advanced from $2,213,000 in 1870 to $22,320,000 in 1900.

THE CARRYING TRADE.

The extraordinary increase in exports and imports during the years from 1865 to 1900 caused a greatly enlarged demand for ocean shipping facilities. As is shown in table 61, the total entrances and clearances at American ports of the shipping engaged in the foreign trade of the United States rose from 18,325,000 tons in 1870 to 56,444,000 in 1900, but the foreign trade conducted in American vessels steadily declined. Not only did the American merchant marine fail to recover from the disasters suffered during the Civil War, but it failed even to maintain the position it held when the war closed. The gross tonnage of the American deep-sea fleet declined from 1,602,583 tons in 1865 to 826,694 in 1900; the proportion of the total foreign trade, in terms of the value of exports and imports, carried in American vessels, fell from 35.6 per cent in 1870 to 9.3 per cent in 1900, and the proportion of the total shipping, in terms of entrances and clearances, declined from 47 per cent in 1865 to 22 per cent in the closing year of the century.

TABLE 61.—*Vessel tonnage and entrances and clearances in foreign trade of the United States, 1860 to 1900.*

Year.	Tonnage of American vessels engaged in foreign trade.	Foreign trade carried in American vessels.		Entrances and clearances of American vessels in foreign trade of United States.	
		Value.	Percentage of total foreign trade.	Tonnage.	Percentage of total entrances and clearances.
	gross tons.	*dollars.*		*gross tons.*	
1860	2,546,237	507,247,757	66.5	12,087,209	71
1865	1,602,583	167,402,872	27.7	5,968,795	47
1870	1,516,800	352,969,401	35.6	6,992,967	38
1880	1,352,810	258,346,577	17.4	6,834,319	19
1890	946,695	202,451,086	12.9	8,149,878	23
1900	826,694	195,084,192	9.3	12,344,570	22

[1]Compiled from annual reports, U. S. Commissioner of Navigation.

Many forces combined to reduce the American deep-sea carrying trade:

The gradual shift from wood to iron and steel and from sailing-vessels to steamships gave an advantage to foreign ship-owners, especially to those of Great Britain. British ship-builders were able to construct iron and steel vessels at less than the cost of construction in American shipyards, and British ship-owners were consequently favored by lower capital costs. American ship-owners desiring to fly the American flag in the foreign trade were prevented from purchasing foreign vessels for American registry by a statute which had been enacted in 1817 and was not repealed until the year 1912. Considerable American capital was invested in vessels flying foreign flags,

but the vessels under the American flag, being burdened by higher capital costs, found difficulty in competing with foreign ships.

A fundamental reason for the decline in the American carrying trade engaged in the foreign trade was the opening of more profitable fields for investment. Many manufacturing, agricultural, mining, and railroad enterprises attracted investors. The growth in the American coastwise marine and the investment of American capital in foreign ships indicate that this rise of new enterprises was not solely responsible for the decline in the deep-sea marine. They, however, afforded fields for investment which were more favorable than were American vessels which were obliged to compete with the ships of foreign nations.

As was explained in Chapter XXV, the Civil War resulted in a severe loss in vessel tonnage, and this loss came at a crucial period in the history of the American merchant marine.

Congress for many years did little to promote the American carrying trade: (*a*) Vessels which adopted foreign flags during the Civil War were refused permission to return to American registry; (*b*) the heavy war-revenue taxes were retained until 1868; (*c*) imports of ship-building materials for use in the construction of wooden vessels were not admitted free of duty until 1872 and those for use in building iron and steel vessels not until 1890; (*d*) liberal mail pay was not provided until March 3, 1891, but three unimportant mail contracts being approved from the close of the Civil War until that year; (*e*) the American navy was neglected during a period of over twenty years.

The operating costs of American vessels were in many instances higher than those of competing foreign vessels.

Various foreign countries, notably Great Britain, France, Japan, and Germany, encouraged their respective merchant marines by carrying out definite policies of government aid.

CHAPTER XXVII.

THE FOREIGN TRADE IN THE EARLY YEARS OF THE TWENTIETH CENTURY, 1900-1913.

Extraordinary growth in foreign trade, 86. The balance of trade in favor of United States, 87. Changes in nature of exports, 87. Increase in exports of manufactures, 88. Exports of raw materials, 89. The shift from exports of agricultural to exports of manufactured commodities, 89. Changes in the foreign markets for exports, 90. Higher tariffs imposed by foreign countries, 91. Progress made in exports to non-European countries, 91. Changes in the nature and source of imports, 92. Restriction on imports of finished manufactures, 92. Relative progress made by the ports in the export and import traffic, 94. Development of foreign markets for American manufactures, 95. Obstacles encountered and progress made in the competition with foreign manufacturers, 96.

Though the conditions existing during the closing years of the nineteenth century foreshadowed many of the changes which have since occurred in the foreign trade, they did not foretell its extraordinary growth. The annual exports of merchandise grew from a value of $1,394,483,000 in 1900 to $1,744,985,000 in 1910, and the import of merchandise from a value of $849,941,000 to $1,556,947,000. From 1910 to 1913 the value of the country's exports and imports of merchandise advanced, respectively, to $2,465,884,000 and $1,812,978,000, and to the unprecedented aggregate of $4,278,862,000.

The increase of 25 per cent in the value of exports and 83 per cent in the value of imports during the first decade of the twentieth century and of 76 per cent and 113 per cent, respectively, during the years from 1900 to 1913, was partly due to a general rise in the prices of commodities. The index numbers of the United States Bureau of Labor show an increase of 14.4 per cent in wholesale prices during the decade 1900 to 1910, those of *Bradstreet* 12.6 per cent, those of the *London Economist* 13.7 per cent, and those of Sauerbeck 4 per cent. The average level of prices according to these index numbers advanced approximately 13.5 per cent in the United States and 8.8 per cent in Great Britain. For the period 1900 to 1913 *Bradstreet's* index numbers record an increase of 17 per cent and those of the *London Economist* an increase of 27 per cent. The value of the entire foreign trade of the United States advanced 47.1 per cent during the first decade and 90 per cent during the first thirteen years of the century. If these increases are reduced in accordance with the above-mentioned index numbers so as to eliminate the effect of the rise in prices, it will bring them into substantial accord with the growth in the shipping engaged in the foreign trade. The total entrances and clearances of vessels advanced from 56,444,000 tons in 1900 to 79,942,000 in 1910 and to 101,799,000 in 1913, an increase of 41.6 per cent during the first decade and 80 per cent during the first thirteen years of the century.

The balance of trade in favor of the United States, using the term as it is commonly understood by exporters and importers, was far greater than during any previous ten or thirteen years in the history of the foreign trade, but it was subject to great fluctuations. The excess of exports over imports of merchandise was greatest in 1908, when the mild depression which then afflicted the country caused a decline in imports but did not affect exports unfavorably. From $666,432,000 in that year the excess of imports fell to $188,037,000 in 1910, and then rebounded to $652,906,000 in the fiscal year of 1913. The excess of exports, including gold and silver movements as well as merchandise, fluctuated from $679,625,000 in 1901 to $273,330,000 in 1910 and $691,820,000 in 1913. The term "balance of trade" as used in monetary circles refers to the ability of a nation to import supplies of the precious metals and depends not only upon the excess of exports over imports, but also upon the remittances for interest, tourist expenditures, sums sent to friends, and freight paid to foreign ocean carriers. The net sums sent out of the United States for these purposes in the fiscal year 1909 have been estimated as follows:[1] Interest, $250,000,000; tourist expenditures, $170,000,000; remittances to friends, $150,000,000; freight, $25,000,000; total, $595,000,000. The excess of exports over imports in that year was $410,347,000, leaving a difference of approximately $184,000,000, which was liquidated by the investment of foreign capital in the United States.

CHANGES IN NATURE OF EXPORTS.

The extraordinary increase in the foreign trade since the beginning of the twentieth century has been accompanied by clearly defined changes in the nature, sources, and markets of the commodities imported and exported. The shift in exports from foodstuffs to manufactures, which became perceptible during the last decade of the previous century, now proceeded with astounding rapidity. The value of food exports, in spite of rising prices, declined from $545,474,000 in 1900 to $369,088,000 in 1910, and it was $502,094,000 in 1913. Relative to the value of all exports they declined from 39.8 per cent of the total in 1900 to a minimum of 19.13 per cent in 1911, and to 20.67 per cent in 1913. There was an abrupt decline in wheat exports from nearly 102,000,000 bushels in 1900 to less than 5,000,000 bushels in 1905, and to 46,680,000 bushels in 1910, and of flour exports from 18,699,000 barrels in 1900 to 8,826,000 barrels in 1905 and 9,041,000 barrels in 1910. The value of the total breadstuffs exported fell from $262,744,000 in 1900 to $133,191,000 in 1910. In 1913 breadstuffs were no longer the principal group of American exports, but were exceeded by cotton, iron and steel manufactures, and provisions. The

[1] Paish, "The Trade Balance of the United States," in *Publications of National Monetary Commission*, Senate Doc. No. 579, 61 Cong., 2 sess., p. 197.

exports of provisions were more generally maintained, but they also fell from a value of nearly $184,500,000 in 1900 to $130,633,000 in 1910, and $155,666,000 in 1913. The number of cattle shipped abroad fell from over 397,000 in 1900 to less than 25,000 in 1913. The astounding decline in food exports was due to the fact that the domestic consumption of food increased at a more rapid rate than production. The increase in the wheat crop did not keep pace with the growing demand for flour in the United States, and the number of beef cattle in the country steadily declined after 1907.[1]

Almost as rapid as the decline in food exports was the growth in the exports of manufactures. With but slight interruptions they rose from a value of $484,846,000 in 1900 to $1,186,990,000 in 1913. The conditions of the manufacturing and food-producing industries were completely reversed, the former having a constantly growing and the latter a greatly reduced surplus output. The increase in the output of the leading manufacturing industries and of the minerals upon which they depend was phenomenal. During the decade 1900 to 1910 the output of coal grew from 232,583,000 to over 431,000,000 tons, iron ore from 27,553,000 to 56,889,000 tons, copper from 270,588 to 482,200 tons, and petroleum from 63,338,000 to 209,556,000 barrels. The value of the annual output of the country's iron and steel works and rolling-mills grew from $597,212,000 to $985,756,000. The annual output of agricultural implements advanced from a value of $101,207,000 to $146,329,000, of cotton goods from $339,223,000 to $628,392,000; leather from $204,038,000 to $327,874,000; lumber and timber products from $761,000,000 to over $1,156,000,000, and refined petroleum products from less than $124,000,000 to nearly $237,000,000.

For the prosperity of these and other manufacturing industries the development of foreign markets became a necessity, not merely as a convenient dumping-ground for occasional unmarketed wares, but as a permanent outlet for a portion of the annual output. Iron and steel exports, including an even wider range of wares than was sold abroad during the decade from 1890 to 1900, made the remarkable advance from a value of $121,914,000 in 1900 to a value of $304,606,000 in 1913, in the latter year leading in value all other American exports except cotton. During this period, also, the exports of lumber, timber and wood manufactures grew from $45,578,000 to nearly $81,000,000; refined mineral oils from $68,247,000 to $129,667,000; cars, carriages, automobiles, etc., from less than $10,000,000 to $54,586,000; agricultural implements from $16,000,000 to $40,572,000, and refined copper and copper products from $57,852,000 to $140,165,000. The exports of cotton goods underwent wide fluctuations. They grew from $24,003,000 in 1900 to nearly $53,000,000 in 1905, then declined to

[1]See chap. xviii.

slightly over $25,000,000 in 1908, and again increased to $50,770,000 in 1912, the latest year for which complete data are available. Progress was also made in the exportation of leather and leather goods, naval stores, chemicals, drugs and dyes, rubber goods, and many less important manufactured commodities. Exported manufactures as a whole comprised 48.84 per cent of the country's entire export trade in 1913 as compared with 35.37 per cent in 1900.

Next to manufactures the largest group of exports during the period from 1900 to 1910 consisted of crude materials for use in foreign industries. Contrary to the trend of food exports, the exports of this group of raw products advanced in value from $325,244,000, or 23.73 per cent of the total export trade, in 1900, to $713,758,000, or 30.13 per cent, in 1913. The leading raw material was cotton, which regained its position as the principal export of the country. The volume of cotton exports grew from 6,806,572 bales in 1900 to 10,675,445 in 1912 and 8,724,572 in 1913, and its annual value grew from $241,883,000 in 1900 to $547,357,000 in 1913. Even though the cotton textile industries of the United States made excellent progress, there was no perceptible increase in the proportion of the total cotton crop retained for home consumption; 66.8 per cent of the crop was exported alike in 1900 and in 1910. Though the annual crop advanced from 10,246,000 running bales in 1900 to over 16,109,000 in 1911 and 14,091,000 in 1912, the prices received gradually rose to a higher level because of greatly increased requirements alike in the cotton mills at home and abroad.

Exports of raw materials also included leaf tobacco. The leaf-tobacco crop rose from 814,345,000 pounds in 1900 to 984,349,000 pounds in 1910, and 953,734,000 pounds in 1913.[1] The quantities shipped abroad increased less rapidly than the total crop, but they advanced from 344,656,000 pounds in 1900 to 418,797,000 pounds in 1913, an increase in value of from $29,422,000 to $49,354,000. Raw materials exported also included 20,709,000 tons of coal valued at $65,000,000 in 1913 as compared with but 7,188,000 tons valued at $19,500,000 in 1900.

The most significant movement in the entire export trade was the shift from agricultural to manufactured products. Although, as was stated above, there was an increase in the value of agricultural exports from $844,616,000 in 1900 to $1,048,434,000 in 1912, this represented a surprising relative fall from 61.6 to 48.3 per cent of the total domestic exports. The Bureau of Foreign and Domestic Commerce has ceased to classify all exports according to their sources, but it reports that during this period the exports of domestic manufactures rose from $484,846,000 to $1,020,417,000, and from 35.37

[1] Estimate of U. S. Department of Agriculture in the "Agricultural Outlook," *Farmers Bull.*, No. 615, p. 28.

to 47.02 per cent of all domestic exports. In 1913 the agricultural and manufacturing industries were of substantially equal importance in the export trade, while previous to 1900 farm products made up the larger share of the export trade of the United States.

CHANGES IN THE FOREIGN MARKETS FOR EXPORTS.

The shift from agricultural to manufactured commodities brought about a further widening of the range of foreign markets. The exports to Europe increased from $1,040,000,000 in 1900 to $1,479,074,000 in 1913. Those to the United Kingdom made but a slight advance from $533,820,000 to $597,149,000, but those to Germany rose from $187,348,000 to $331,684,000; those to France from $83,335,000 to $146,100,000; and rapid progress was made also in exports to Italy. Indeed, the exports to all the principal European countries increased after the close of the nineteenth century, but the progress made in other parts of the world was more rapid, and the proportion of the total exports of merchandise destined to Europe consequently declined from 74.6 per cent in 1900 to 59.9 per cent in 1913. During the last decade of the nineteenth century there had been fear among European producers that Europe would be commercially "Americanized,"[1] but during the early years of the twentieth century it became clear that the commercial struggle between Europe and the United States centered not in the European market, but in the undeveloped markets throughout the remainder of the world. After the close of the last century the imports received from Europe increased more rapidly than the exports shipped from the United States to Europe. While a limited European market for finished manufactures was available, the shipments of manufactures to Europe consisted chiefly of a few standard articles, such as lumber, refined copper, leather uppers, and mineral oil. While 60.87 per cent of the total exports of the United States were destined to Europe in 1912, but 30.76 per cent of the exports of finished manufactures found a market in the Old World. This, moreover, included Russia and other East European countries, which are agricultural, and consequently import large quantities of manufactured wares.

In the markets of western Europe the American manufacturer was confronted by well-established home industries, and in all the leading countries except the United Kingdom and the Netherlands by protective tariff duties. Even before the end of the nineteenth century protection was adopted in continental Europe, one motive of which was to exclude competitive products and another of which was to retaliate against the high rates of the Dingley tariff act. Dual tariff

[1]See McKenzie, *The American Invaders;* Stead, *The Americanisation of the World;* Vanderlip, *The "American Commercial Invasion" of Europe.*

schedules, especially fitted to meet the requirements of the respective countries, were adopted in France, Spain, Russia, Greece, Norway, Germany, Austria-Hungary, Italy, Switzerland, Belgium, Roumania, Serbia, and Bulgaria. In 1898 a reciprocity agreement was entered into with Switzerland; in 1898 and 1908 with France; in 1900 and 1907 with Portugal; in 1900 and 1909 with Italy; and in 1900 and 1907 with Germany; but the French, Portuguese, and Italian agreements were restricted to a limited number of products, and the Swiss agreement was terminated in 1900. The German agreement was far-reaching and was to some extent responsible for the continued advance of the export trade with Germany; but even the autonomous schedule which it granted to American merchants is at many points highly protective.

As American sales increased, European protection gradually became more stringent. In 1906 Germany enacted a tariff law which materially raised both the general and autonomous schedules of rates on virtually all products imported from the United States except cotton, coffee, cotton-seed oil, turpentine, oil-cake, cement, and certain other articles essential to German industry. In the same year many other European nations heightened the tariff wall against American exports. France raised the rates on dynamo-electric, freezing, hydraulic, and weighing machines, watches, musical instruments, fish, fruits, vegetables, and various other products. Spain granted the minimum schedule to the United States, but raised the rates on electrical and heavy machinery, typewriters, automobiles, hams, lard, and bacon. Austria-Hungary increased her tariffs on grain, flour, iron and steel wares, automobiles, threshing machines, cotton fabrics, fine cotton yarn, hats, shoes, and stoves. Greece still further raised the rates on grain; Switzerland, on leather and shoes, copper, agricultural machines, domestic implements, sewing-machines, tobacco, typewriters, meat products of various kinds, and timber; and Russia on fruits and confectionery. The increases were partly counterbalanced by simultaneous reductions of the rates on various products in Russia, Switzerland, Holland, Norway, and Spain, but in the aggregate the tariff rates in continental Europe on all American commodities which were not essential to European industrial progress were raised.

Western Europe was chiefly a market for cotton, leaf tobacco, wheat, flour, meat products, and other agricultural crops. Of these the first two were shipped in increasing quantities, but exports of the others declined, chiefly because they were needed for home consumption. Western Europe continued to import outside foodstuffs, but was no longer dependent almost solely upon the United States for them. New sources of supply arose, notably in Russia, Australia, New Zealand, India, Argentina, and Canada, where there was a growing surplus of farm products as there had formerly been in the United States.

The exports of merchandise to the foreign markets of North America advanced from $187,594,000 or 13.5 per cent of the total export trade in 1900 to $617,413,000 or 25 per cent in 1913. Extraordinary progress was made in Canada, the exports to that country increasing from $95,320,000 to $415,449,000, and more extensive markets were also found in Cuba and Mexico. The exports to the Orient advanced slowly and irregularly from $64,913,000 or 4.66 per cent of the total in 1900 to $115,057,000 or 4.7 per cent in 1913. Shipments to Oriental markets were at their highest point in 1905 with $128,500,000, heavy declines having since occurred in the trade with China and Japan. The exports to South America also advanced from less than $39,000,000 to $146,148,000 and from 2.8 to 6 per cent of the total export trade. Unusual progress was made in Argentina, and better markets were developed in Brazil, Chile, Peru, and Uruguay. The exports to Australasia advanced from $43,391,000 to $79,103,000, but relative to the entire export trade the Australasian shipments made little headway. In 1913 they comprised but 3.2 per cent of the total. The African trade advanced from $19,469,000 to $29,089,000, but relatively it too declined from 1.4 to 1.2 per cent of the entire export trade of the United States.

CHANGES IN NATURE AND SOURCES OF IMPORTS.

The imports of the United States after 1900 were greatly influenced by the development and diversification of the manufacturing industries. The need of raw and semi-raw materials for use in American factories and mills caused an unusual increase in the imports of crude materials, notably india-rubber, hides and skins, raw silk, wool, leaf tobacco, fibers, and long-staple cotton, which grew in value from $276,241,000 in 1900 to $635,210,000 in 1913 and from 32.5 to 34.9 per cent of the entire import trade of the United States. Manufactures for further use in the manufacturing industries, especially chemicals, unset diamonds, lumber and cabinet-woods, and tin, likewise advanced from $134,222,000 in 1900 to $349,401,000 in 1913, and from 15.8 to 19.2 per cent of the total import trade.

On the other hand, the rise of the manufacturing industries and the protective tariff duties, which remained extremely high until the enactment of the tariff law of October 3, 1913, made it increasingly difficult to import finished manufactures. The imports of this group advanced in value from $203,126,000 in 1900 to $410,608,000 in 1913, but relatively they declined from 23.9 to 22.6 per cent of all imports. The imports of crude foodstuffs—coffee, cocoa, fruits, and tea—barely maintained their relative position, although their total value advanced from $97,916,000 to $211,747,000. Those of foodstuffs, partly or wholly prepared, advanced slowly from $133,027,000 to over $194,243,000 in value, but relatively declined from 15.6 to 10.7 per

cent of the entire import trade. Although sugar continued to be the leading single import, its advance from $100,251,000 to $103,640,000 indicated a growth which was much less than that in many other branches of the import trade.

There was far less change in the sources of imports during the years 1900 to 1913 than in the markets for exports. So rapid was the increase in the imports received from Europe that the gradual decline in the European ratio which had characterized the nineteenth century was checked; 49.2 per cent of the import trade in 1913 centered in Europe, the annual amount after 1900 varying from 48.4 to 52.6 per cent, as compared with a variation of from 45 to 57.1 per cent during the decade 1890 to 1900. The value of the imports received from Europe advanced from $440,567,000 in 1900 to $892,866,000 in 1913, or over 102 per cent as compared with an increase of 42 per cent in the exports from the United States to Europe. Though imports of manufactures as a whole made little progress, the imports received from Europe included many items which increased with marked rapidity, such as laces, ginghams, and other textile wares of fine quality, works of art, diamonds, furs, chemicals, tin, cabinet-woods, silk, fruits and nuts, wool and india-rubber. European countries, especially England, and to a less extent Holland, Belgium, Germany, and France, still acted as broker nations in the import trade of the United States. Favored by superior transportation services, colonial possessions, and mercantile and investment connections, they collected wares from distant parts of the world and shipped them to the United States and other markets. More india-rubber came to the United States from Europe than from South America or Africa, more wool than from Australia, more mahogany than from Central America, Mexico, and Africa, and practically all the diamonds received from the diamond fields of South Africa came by way of European countries.

More than one-half of the import trade (50.8 per cent in 1913) came from non-European countries. The greatest progress during the years 1900 to 1913 was made in the imports from North America, which advanced from $130,035,000 to nearly $362,000,000, and from 15.3 to 20 per cent of the entire import trade. The imports from Cuba, stimulated by the reciprocity treaty of 1902, increased from $31,371,000 to $126,088,000, those from Canada from $39,931,000 to $120,571,000, and those from Mexico from $28,667,000 to $77,544,000. The imports from South America likewise grew from $93,667,000 to $217,735,000 and from 11 to 12.1 per cent of the entire import trade of the United States. Increased quantities of imported wares were received from Brazil, Argentina, Chile, Peru, Colombia, and Venezuela, those from Brazil aggregating $120,156,000 in the fiscal year 1913. The imports from the remaining grand territorial divisions progressed less rapidly. Those from the Orient rose from $139,842,000 in 1900 to $276,495,000

in 1913, but declined relatively from 16.45 to 15.2 per cent of the total import trade of the United States. Those from Australasia grew in value from $34,611,000 to $37,543,000, but they too declined relatively from 4 to 2 per cent of the total, while those from Africa rose from $11,218,000 to $26,425,000, their relative position remaining substantially unchanged. The imports from Australasia were but 1.4 per cent of the total import trade of the United States in 1913.

The foreign trade in the United States during the years from 1900 to 1913 was more widely distributed among the ports and other gateways of exit and entrance than was true of the foreign commerce during the closing decade of the nineteenth century. As usual, the greatest volume of foreign trade flowed through the large ocean ports of the Atlantic seaboard. The annual imports of these ports advanced from $693,113,000 in 1900 to $1,375,850,000 in 1913. Those entering the port of New York advanced from $537,237,000 to nearly $1,048,321,000, and comprised 57.7 per cent of all the imports received in the United States. The volume of imported wares also increased at Boston, Philadelphia, Baltimore, Wilmington (North Carolina), Savannah, Norfolk, Perth Amboy, and even at Charleston, where trade had been stagnant since the Civil War. The exports shipped from the ports of the Atlantic increased less rapidly, but they too rose from $963,569,000 to $1,348,811,000. Those of New York grew from $518,834,000 to $917,936,000, and in 1913 comprised 37 per cent of the entire export trade of the United States. The exports of Savannah, Norfolk, and Wilmington also progressed rapidly, but those of some of the other leading Atlantic ports—Boston, Philadelphia, Baltimore, and Newport News—declined after the beginning of the nineteenth century.

Extraordinary progress was made at the ports of the Gulf coast, their imports advancing from $23,693,000 in 1900 to $103,613,000 in 1913, and their exports from $234,108,000 to $543,077,000. New Orleans received most of the imports which entered via the Gulf, the annual imports of that port growing from less than $17,500,000 to more than $82,250,000. The exports from New Orleans likewise advanced, but they were exceeded by those of Galveston, where the export trade had an astonishing increase from $85,658,000 to $281,458,000. Galveston became the second port of exportation in the United States and the greatest cotton-shipping port in the world. Mobile, Pensacola, and Sabine, Texas, also shipped greatly increased quantities of exports, although the imports received by them remained relatively small.

The group of ports third in importance in the foreign trade comprised those of the Great Lakes and the northern border. Because of the rapid growth of the trade with Canada, the imports received through these ports advanced from nearly $60,000,000 in 1900 to $153,613,000 in 1913, and the exports shipped through them grew from $104,267,000 to nearly $402,000,000. The foreign trade of the Pacific coast also

advanced to a new high level, the Puget Sound ports taking the lead in the volume of exports and San Francisco in the import trade. The exports of all the Pacific coast ports combined grew from $70,175,000 to $146,856,000 and their imports from less than $59,000,000 to $128,895,000. Meanwhile the exports shipped directly across the Mexican border increased from $22,320,000 to nearly $25,000,000, and the imports received in that way from $5,378,000 to $27,059,000.

DEVELOPMENT OF FOREIGN MARKETS FOR AMERICAN MANUFACTURES.

The most significant lessons disclosed by the rapidly growing foreign trade of the years 1900 to 1913 were in connection with the development of markets for American manufactures. The sale of such wares in the new and undeveloped markets of the world, as well as in Europe, proved far more difficult than the sale of foodstuffs and raw materials in the established markets of western Europe. At every step the exporters of American manufactured goods encountered vigorous competition by European manufacturers who had regularly shipped their wares to the non-industrial countries of the world during all the years of the nineteenth century, when American merchants regarded those countries chiefly as sources of imports and as dumping-grounds for occasional cargoes which could not be readily sold in the domestic or European markets. However, the improvement in the position of the American exporter as compared with his European rivals, after the close of the nineteenth century, was highly gratifying, especially in some of the newly developed markets. The proportion of the total imports of Canada received from the United States, for example, although England was favored by preferential import duties, advanced from 60.3 per cent in 1900 to 63.4 per cent in 1911. The relative position of American exports in Mexico likewise rose from 50.6 to 53.9 per cent, in Cuba from 44.2 to 52.8 per cent, and in the British West Indies from 26.5 per cent to 42.9 per cent[1] of the total imports of those countries.

In many other markets sought by the American manufacturer, his relative position was distinctly secondary, although the total volume of American wares purchased gradually increased. In Argentina, the leading South American market, the United States furnished 11.8 per cent of the total imports in 1900 and 13.8 per cent in 1910. In Chile the relative share of the United States likewise rose from 9.4 to 12.4 per cent, and in Brazil from 12.5[2] to 13.0 per cent. In China it advanced from 7.5 to 8.5 per cent, and in British India from 1.7 to 3.8 per cent.[3] The relative progress made in these countries was gratifying, but the smallness of the total imports received from the United States is an index of the foreign rivalry which was encountered. In some of the newly sought foreign markets, the share of imports provided by the United States has declined since the close of the nineteenth century. In

[1]Year 1910. [2]Year 1901. [3]Year 1911.

Australia, even though the imports from the United States increased in volume, the American proportion declined from 12.2 in 1900 to 11.6 per cent in 1911, and in New Zealand the decrease in the same time was from 10 per cent to 8.2 per cent. The imports of Japan from the United States likewise declined from 20.9 to 15.8 per cent of the entire import trade of the Empire.

The obstacles encountered in the competition with foreign manufacturers were various. European exporters, having obtained a foothold in the past, could not be easily dislodged and were in a position where they could readily take advantage of trade opportunities. In many instances the more widespread investment of European funds in the countries where markets were sought has been a powerful trade asset. Superior steamship service was a point in favor of European producers, and so was the policy of manufacturing expressly for foreign markets, the establishment of European banks, the policy of direct sales through branch houses, export houses, and salesmen who are acquainted with local conditions, the extension of long-term credit when necessary to make sales, the ability to sell at low prices because of low cost of production, and the policy of careful packing and adherence to specifications. In some markets the political control by European countries has been an obstacle to American traders, for while trade does not blindly follow the flag, yet political control has frequently led to the investment of European funds and to the enforcement of tariffs favorable to the controlling country.

At some points the relative absence of return cargoes was a disadvantage to American exporters. Australia, New Zealand, and Argentina, for example, found an American market for relatively few of their great agricultural exports. Their exports being sold very largely in Europe, it was almost inevitable that large quantities of European wares would be imported.

In China the struggle for markets was made severe by the activities of Japan. Favored by low cost of production, geographical proximity, cheap and effective transportation, and thorough understanding of Chinese trade conditions, Japan became the leader in the foreign trade of China. Since 1905, European as well as American exporters have suffered from the effects of Japanese competition. The rise of the manufacturing industries of Japan, moreover, gradually narrowed the Japanese market for American manufactures, and in 1907 Japan adopted a protective tariff policy which proved to be detrimental to American trade. When the price of raw cotton increased, the Japanese market for American cotton also narrowed, the textile mills of Japan turning more and more to the low-grade cotton of India and China.

Aside from foreign competition, certain obstacles retarded the sale of American exports in the newer markets of the world. The undeveloped condition of some of these countries placed them in strong contrast

with countries having the settled conditions to which the American exporter was accustomed in trading with Western Europe. Brazil and Australia afforded few great markets, because wide stretches of their territory were unpopulated, while in China and parts of Africa, where there was a dense population, the sales were nevertheless restricted because the requirements and purchasing power of the people were limited. Political and military disturbances were an obstacle to uninterrupted trade in countries such as China, Mexico, and the Central American republics. Local difficulties, moreover, sprang up in certain countries, causing temporary trade upheavals. In Brazil, for example, the low price of coffee from 1905 to 1910 prevented many of the people of the Brazilian coffee states from purchasing large quantities of imports. The Chinese policy of restricting the poppy culture, though certain to promote ultimately the welfare of China, caused an abrupt fall in the purchasing power of many of the people of that country, who were deprived of their accustomed means of gaining a livelihood.

American exporters have made much progress since the close of the nineteenth century, and they have profited by their past mistakes. Effective selling organizations have been adopted, especially by some of the large industrial corporations, whose strong financial standing enables them to undergo the costs and risks incident to the development of markets in little-known foreign countries. They have established foreign branch houses, sent out agents, and placed skilled sales managers in charge of their export business. Though many orders continue to be filled through commission houses, the importance of export houses which purchase and sell on their own account has gradually increased in the United States as it has in Europe. A growing number of concerns have undertaken the manufacture of wares expressly for the export trade and abandoned the long-standing belief that foreign market customs can easily be changed to suit the convenience and wishes of the American manufacturer. Efforts have also been made to sell American exports on the same credit terms as those granted by European exporters.

The deep-sea marine of the United States continued up to 1913 in the static condition which prevailed during the last decade of the nineteenth century. Beginning with 1913 there has been a gratifying annual increase in the tonnage of American shipping engaged in the foreign trade, but in 1912 the entire registered fleet aggregated only 932,101 gross tons, it carried but 9.4 per cent of the commodities imported and exported, and constituted but 23 per cent of the shipping which entered and cleared American ports in the foreign trade of the United States. The steamship service between the United States and the newer markets of the world continued to be inferior to the service from Europe, but it was improved to some extent, and further improvement is looked for as a result of the opening of the Panama Canal.

CHAPTER XXVIII.

THE TRADE WITH NON-CONTIGUOUS POSSESSIONS.

Commercial importance of outlying possessions of the United States, 98. The trade with Alaska, 99. The trade with the Hawaiian Islands, 101. The sugar industry of Hawaii, 103. The trade with Porto Rico, 104. Trade of the Philippine Islands under Spanish dominion, 107. The trade of the Philippines since American acquisition, 109. Advance in Philippine trade with the United States, 111. Commercial value of non-contiguous possessions summarized, 112. Statistics of trade between the United States and its non-contiguous territories, 1899, 1900, 1905, 1910, 1913, 114.

The commercial importance of the outlying possessions of the United States has from the time of their acquisition been the subject of much discussion. Opposing views are held as to the usefulness of the possessions, some persons ascribing to these territories almost limitless value as stepping-stones to the foreign markets of the world and as direct sources of trade, while others regard them as politically burdensome and commercially useless. The years which have passed since the last territory was acquired have gone far to demonstrate that the extremists neither among the optimists nor the pessimists were correct in their conjectures.

While the possessions of the United States have not become points of redistribution from which large quantities of American wares are reshipped to surrounding foreign markets, they have become regions having a heavy direct trade with the United States. In the fiscal year 1913 they provided markets for American wares valued at $108,303,000, and shipped domestic products valued at $128,207,000 to the United States. As markets for American exports and as sources of needed imports they are exceeded in importance only by Great Britain, Canada, Germany, and France. The annual trade between the United States and these possessions exceeds that conducted between the United States and Japan or China, Cuba, Argentina or Brazil, Australia, Italy, Belgium or the Netherlands.

The trade with the non-contiguous possessions may be conveniently divided into (1) the trade with Alaska, (2) with the Hawaiian Islands, (3) with Porto Rico, and (4) with the Philippine Islands. A small trade has arisen with Guam, Tutuila, and the Midway Islands, but the commercial value of these minor territories has been chiefly in their use as ports of call. Shipments to the Panama Canal Zone during the period of canal building consisted chiefly of materials, fuel, supplies, and foodstuffs for use of the construction forces. Much freight has also been transshipped across the Isthmus by rail, but the entire trade with the Canal Zone has been so completely dependent upon the work of canal construction that it may be omitted from further discussion.

THE TRADE WITH ALASKA

The first non-contiguous territory acquired by the United States was Alaska. At the time of its acquisition, October 18, 1867, there were not half a dozen prominent men in Congress who spoke in its favor. It was stated on the floor of Congress that "the people of the country do not want these Russian possessions. If submitted to them they would reject the treaty by a majority of millions. Alaska, with the Aleutian Islands, is an inhospitable, wretched, and god-forsaken region, worth nothing, but a positive injury and encumbrance as a colony of the United States."

When this discouraging sentiment prevailed the one article of Alaskan commerce consisted of furs. The Alaskan fur trade had begun long before Alaska was acquired by Russia.[1] After the discovery by the Russian Commander Vites Bering, in 1741, trade was extended to Russia and the fur markets of the remainder of continental Europe and England. In 1787, two Boston trading-vessels procured a cargo of furs in the Oregon country for use in the Chinese trade, and soon thereafter vessels from various Atlantic ports actively engaged in the Alaskan fur trade,[2] the furs usually being exchanged in China for cargoes of tea, silk, spices and chinaware. The Russian-American Company and the individual merchants of the Atlantic coast drew a large proportion of this early Alaskan trade to the United States.

A new but temporary phase of Alaskan commerce developed shortly after the discovery of gold in California. So great was the demand for supplies in San Francisco that cargoes of old goods which had been held in the warehouses of the Russian-American Company for decades were disposed of at fabulous prices. In exchange for corn, dried beef, and tallow, Alaska provided the California gold-seekers with Russian tools, implements, ironware, and salt fish. However, the only permanent branch of Alaskan trade prior to the discovery of gold in Alaska, and for more than fifteen years after the annexation to the United States, was the fur trade. It is estimated that during the first twenty-two years subsequent to annexation, furs valued at over $48,500,000 were exported. In more recent years the fur trade has declined because of the ruthless destruction of the fur-bearing animals, which formerly abounded, until in the fiscal year 1913 the entire receipts of Alaskan furs in the United States amounted in value to but $751,000.

Alaskan commerce since the decline of the fur trade has depended chiefly upon two great industries—the gold mines and the fisheries. Gold was first found in southwestern Alaska in 1863, that district being later developed with Ketchican as the supply center in the south and Juneau holding a similar position in the north. A second gold district came into prominence in 1883 on the upper Yukon—Dawson City, the

[1] Bancroft, *History of Alaska*, 97. [2] U. S. Census 1890, *Alaska*, 243.

Klondike, and the surrounding region, located partly in Alaska and partly in Canada, focusing the attention of the entire world. A third large district was discovered in 1898 in the vicinity of Cape Nome. Since then gold-mining has continued throughout each of these districts and some of the metal has been found in many other parts of Alaska. An irregular volume of Alaskan gold continued to come into the United States even after the gold craze had subsided. Not until recently has the annual Alaskan gold output been estimated with a reasonable degree of accuracy; hence detailed comparisons with the past can not be made. The United States Geological Survey estimates that since 1905 the annual output has varied from $15,667,000 to over $22,000,000. Moreover, large quantities of gold have been shipped to the United States from the Canadian gold-fields lying beyond the boundaries of Alaska. In 1912 the United States received from Alaska a total of $20,733,000 in gold and silver, $17,491,000 coming from the gold-fields of Alaska and $3,242,000 from those located adjacent to Alaska.

Though occasional shipments of Alaskan fish were made during the old fur-trading era, the Alaskan fish trade, which later became so important, had its real beginning with the establishment of the salmon-canning industry at Sitka in 1878. Its success was so marked that salmon canneries were later erected at various points along the entire coast from the southern peninsula throughout the Aleutian Islands to Bristol Bay and Bering Sea. The value of the annual output of the Alaskan canners has in recent years ranged from $10,000,000 to over $16,000,000. The value of the shipments of Alaskan salmon to the United States in 1913 amounted to nearly $17,000,000, and the total shipments of all varieties of Alaskan fish were valued at nearly $18,000,000.

Aside from gold and fish, but few Alaskan products have been shipped to the United States since the decline of the fur trade. The extensive copper deposits have remained almost untouched. It is only since 1910 that appreciable quantities of Alaskan copper have been shipped to the United States, the shipments in 1912 being valued at $5,000,000 and in 1913 at $3,500,000. The vast deposits of Alaskan coal have remained untouched on account of the lack of railroads and the policy of the United States Government regarding the establishment of coal claims.[1] Indeed, Alaska has imported coal from Seattle and British Columbia. The Alaskan forests of cedar and Sitka spruce have likewise been for the most part left uncut, Washington and Oregon lumber valued at $400,000 to $500,000 being annually imported.

The total shipments of merchandise from Alaska to the United States has slowly risen from a value of $10,635,000 in 1903, when accurate records were first kept, to $24,000,000 in 1913. As late as 1911 the entire shipments of merchandise were valued at less than $12,000,000. The shipments of all Alaskan products to the United States, including gold and silver, have increased from $15,750,000 to

---

[1]In 1914 provision was made for the construction of a Government railroad in Alaska.

$38,750,000 during the period 1903 to 1913, while the receipts of foreign gold from Alaska have declined from $11,000,000 to $4,250,000.

The Alaskan market for American wares has gradually broadened, but has always been small. The shipments to Alaska have risen from less than $9,500,000 in 1903 to $20,180,000 in 1913. It is only since 1898, when goods valued at $13,667,000 were shipped to Alaska, that a market of any consequence has been found. During the entire period 1880 to 1905 the shipments ranged from less than $500,000 to $3,000,000 annually. Alaska has been a market chiefly for iron and steel wares, breadstuffs, provisions and eggs, explosives, woolen and cotton goods, liquors, tobacco, mineral oils, vegetables and fruits, lumber, and boots and shoes. The nature of Alaskan industries has been such that the greatest flow of products has necessarily been outward rather than inward. Moreover, while the area and resources of Alaska are large, the population has always been so small that no extensive purchase of American exports has been possible. In an area of nearly 591,000 square miles there were but 63,600 inhabitants in 1900, less than 64,300 in 1910, and approximately 64,500 in 1912, the white population comprising less than one-half of the total. Not until railroads are constructed, and the coal, copper, and other mineral and lumber resources are opened for development, is it likely that there will be a large Alaskan market for American exports.

THE TRADE WITH THE HAWAIIAN ISLANDS.

Of greater direct value to American commerce than Alaska are the Hawaiian Islands, which became an American possession in August 1898, and were organized as a Territory in 1900. In addition to their services as a coaling-station, as a port of call for some of the merchant vessels plying between the Pacific coast and Australia, New Zealand, and the Orient, and as a naval station, the Hawaiian Islands have been a factor of no little importance in the commerce of the United States. The shipments of domestic merchandise between the United States and these islands in the fiscal year of 1913 were valued at $73,064,000, which was considerably more than the value of the trade with any other outlying possession.

The history of the commercial relations between the United States and Hawaii may be divided into three main periods: (1) the sandalwood era, (2) the era of whaling ships, and (3) the sugar-trade era.

The Hawaiian sandalwood trade of the past was largely the outgrowth of the trade with the Oregon country and China.[1] In 1786 a merchant of Boston formed a stock company to engage in the western fur trade, and its two vessels, after obtaining a quantity of Oregon furs, proceeded to Hawaii and other Pacific Islands in 1787 to secure a

[1] See Carpenter, *America in Hawaii*, 29–35; Jarvis, *History of the Hawaiian Islands*, 68–79; Blackman, *The Making of Hawaii*, 187.

supply of sandalwood with which to complete their cargoes. Other adventurous merchantmen soon followed this example, and a lucrative trade in sandalwood was established. The common course of trade was to obtain a supply of furs on the Pacific coast, then to complete the cargoes with sandalwood obtained from the Hawaiian native chiefs in return for firearms, ammunition, liquor, hardware, cotton, woolen and linen cloth, and trinkets, and to proceed to China, where the furs and sandalwood were exchanged for silks, teas, chinaware, and spices, which in turn were sold in Europe and the United States.

Though the chief Hawaiian product during the first period was sandalwood, after 1800 small quantities of other products, such as pearls, cocoanuts, and vegetables, were bought from the natives; and in addition to the customary articles for barter, occasional shipments of horses were made to Honolulu from Boston and California. In 1790 England broke the Spanish monopoly of the trade of the Pacific and thereafter the trade both of England and America with the Hawaiian Islands was firmly established. During this early period, moreover, Honolulu was developed into a port of redistribution.[1] For many years the trade of the Spanish-American possessions—Mexico and California—was closely restricted to Spain, and foreigners seldom traded there except as smugglers. The practice of American merchants was then to collect cargoes of American and Chinese products at Honolulu in order that they might be smuggled thence into Mexico and California, when the opportunity arose, and be exchanged for hides, furs, coin, and live-stock.

The supply of sandalwood, however, because of the wasteful exploitation by the native chiefs, was soon so seriously reduced that the direct trade with Hawaii would speedily have disappeared, had not a new trade basis been found in the harboring of the Pacific whaling fleets at Honolulu. As early as 1823 it was not uncommon to find from 40 to 60 American whale-ships at Honolulu. At first they entered the harbor for shelter, recruits, repairs, and provisions, but later many of them unloaded their oil and transshipped it to the United States in merchant vessels. The additional cargo which this provided to the merchantmen was sufficient to cause them to continue their Hawaiian trade, and their frequent arrival soon resulted in the appearance of other Hawaiian products to supersede sandalwood. Moreover, the vessels now returned to the United States directly with their cargoes without proceeding to China. They brought to the United States, in addition to whale-oil, cargoes of hides and skins, salt, tobacco, tallow, mustard seed, wool, and an assortment of miscellaneous products. The chief American products exported to the islands were miscellaneous staple goods and groceries from the Atlantic ports, lumber, spars, and salmon

---

[1]Alexander, *The Relations between the Hawaiian Islands and Spanish America in Early Times* (papers of the Hawaiian Historical Society, No. 1, 1892).

from the Columbia River, live-stock from California, and specie and bullion from Mexico. About one-half of all the imports of Honolulu were from the United States, one-fourth from China, California, and Oregon, and the remainder chiefly from England, Mexico, and Chile. Toward the end of this period the United States and England became the principal rivals in the Hawaiian trade.

The third period of trade with Hawaii began in 1853, when sugar-growing became an important industry in the island. Though sugar cane is indigenous to the Hawaiian Islands, the first establishment for making sugar was not erected until 1825. Others soon followed, but sugar did not become the chief article of export until the early fifties, the lack of available capital and the difficulty of finding a market because of the American protective tariff preventing a rapid growth of sugar culture. The remedy was found in the Hawaiian reciprocity treaty of 1876, which placed sugar and practically all products of the Hawaiian Islands upon the free list, in exchange for like privileges for practically all American wares seeking a market in the islands.

Commercially, the treaty, which was renewed with but slight changes in 1887, and which continued until the date of annexation, at once caused a rapid extension of the sugar industry. Oriental coolies were imported as laborers, and much American capital was invested. Indeed, many of the sugar plantations, both old and those newly established, came to be owned and controlled by American citizens. Immediately after the ratification of the treaty, shipments of Hawaiian products to the United States increased from $1,376,681 in 1876 to $2,550,355 in 1877, and the shipments from the United States to the islands increased from $662,164 to $1,272,949. The clause in the treaty which prevented Hawaii from granting similar tariff favors to foreign nations and the great market for sugar which was available in the United States, after tariff barriers were removed, placed an increasing proportion of the total commerce of Hawaii under American control. Immediately before annexation 99.6 per cent of all Hawaiian exports were shipped to the United States and 76.9 per cent of the total imports consisted of American products.

The building up of the sugar industry placed the commerce of Hawaii upon a sound footing, and both the shipments and receipts of Honolulu steadily increased. The shipments of Hawaiian products to the United States grew from a value of $17,831,000 in 1899 to $55,056,000 in 1912 and $42,652,000 in 1913. The extent to which sugar dominated Hawaiian commerce is indicated by the fact that during the two years 1912 and 1913, 90 and 86 per cent, respectively, of all the imports received from the islands consisted of sugar. Over 1,000,000,000 pounds annually of Hawaiian raw sugar have in recent years been imported by the sugar refineries of the United States. The remaining receipts have consisted chiefly of refined sugar, canned pine-

apples, coffee, rice, molasses, and hides and skins. The shipments of American wares to Hawaii have been less in volume, but they, too, have been advanced from a value of $9,007,000 in 1900 to $30,412,000 in 1913. These shipments consist of a wide variety of iron and steel wares, mineral oils, meat products, breadstuffs, lumber, cotton goods, wines, tobacco, and canned salmon.

While the shipments from the United States have in recent years been largely from the Pacific coast, the receipts from Hawaii have been about equally divided between the Pacific and Atlantic seaboards. Foreign competition has been relatively slight ever since the adoption of the reciprocity treaty, and it has almost disappeared since the annexation of the islands, which removed the last vestige of the tariff on the trade between Hawaii and the United States, excluded all foreign vessels from this trade, and made the islands a part of the United States, politically as well as commercially. In 1913 the exports from Hawaii to foreign countries aggregated but $740,000, and the imports from foreign countries totaled $6,800,000. Japan has in recent years been the only foreign country to find a substantial Hawaiian market, the remaining imports from abroad having come principally from India, England, Germany, Scotland, Chile, Hongkong, Australia, and the Dutch East Indies.

THE TRADE WITH PORTO RICO.

As a result of the war with Spain, the United States, on December 10, 1898, acquired an important island possession in the Atlantic Ocean. Located in the midst of the West Indies, on a fairly direct route from the Atlantic and Gulf seaboards of the United States to South America, and from Europe to the Panama Canal and various foreign West India ports, Porto Rico has a promising commercial outlook. The direct trade of the United States with Porto Rico is greater than that with any other outlying possession except Hawaii, and in recent years it has increased with greater rapidity than the trade with any other American dependency. The total value of the domestic wares exchanged in the fiscal year of 1913 was $72,753,000.

The history of the commerce between Porto Rico and the United States, while the former was under Spanish dominion, covers an exceedingly long and uninteresting period. There were numerous shipments between the American Colonies and San Juan, but they were a minor factor in the great West India trade, in which the Colonies had engaged ever since the beginnings of American foreign commerce. Spain controlled the government of Porto Rico for three hundred and fifty years, during which time the usual trade restrictions were applied in all their accustomed forms, so as to keep Spanish trade for Spain. As early as 1614, for example, it was decreed that, though the tobacco culture was permissible, no tobacco might be sold to foreigners "under penalty of

death,"[1] and in 1777 and 1784, again, exceedingly harsh restrictions were imposed, some of which were so burdensome that obedience at all times was out of the question. Toward the end of the Spanish rule there were but few laws which retarded the importation into the United States of native products from Porto Rico, but the discriminating tariffs of Spain continued to be an obstacle in the path of the American exporter. Though the inhabitants of Porto Rico, unlike those of the other southern colonies of Spain, were generally peaceful and not addicted to revolutions, the material progress of the island was slow.[2] Both the import and export trades of the United States with Porto Rico during the Spanish epoch experienced violent fluctuations. American exports to the island in 1855 were valued at $1,145,000, and in 1865 at $3,513,000, a value not exceeded until the final break from Spain, while in 1897, immediately before the Spanish war, they amounted to but $1,965,000. The imports from Porto Rico experienced similar fluctuations, but were usually much in excess of the export trade. In 1855 the United States imported Porto Rican products valued at $2,476,000, in 1860, at $4,513,000, and in 1872, at $11,328,000, the maximum prior to the acquisition of the island. In 1897 the value of the imports from Porto Rico into the United States was but $2,181,000.

After Porto Rico became an American colony in 1898, the commercial situation changed in three important respects:

(1) The trade between the island and the United States underwent a marked increase. Almost without interruption the shipments of American wares to Porto Rico increased in value from $4,261,000 in 1900 to $32,223,000 in 1913; and the shipments of domestic products of Porto Rico to the United States during the same period advanced from $3,079,000 to $40,530,000. This rapidly growing trade has been conducted largely between four ports—New York and New Orleans in the United States, and San Juan and Ponce in Porto Rico. Ports of minor importance have been Boston, Galveston, Philadelphia, Mobile, and Sabine, Texas, the trade being more widely scattered in the later years. It has been conducted exclusively in American vessels, for the Porto Rican trade has been included in the coastwise trade of the United States.

(2) The commodities comprising the Porto Rican trade have changed in rank since the island became an American Territory. In 1899, according to the first census of Porto Rico, 41 per cent of the cultivated land produced coffee, 15 per cent sugar cane, 14 per cent bananas, 8 per cent sweet potatoes, 4 per cent Indian corn, 2 per cent malangas, 2 per cent rice, 1 per cent coconuts, and 1 per cent was devoted to tobacco. Half a decade later, however, the productive system of the island was very different: "The crisis in the coffee industry, which brought about

---

[1] van Middeldyk, *The History of Puerto Rico*, 222.
[2] *Census of Porto Rico, 1899*, pp. 13–17.

this reversal, was due to over-production induced by previous high prices, partial loss of the Spanish market owing to the imposition of high duties, partial loss of the French market for a similar reason, the change in the money standard, and the hurricane of August 8, 1899."[1] No sooner was the commerce between Porto Rico and the United States declared to be domestic trade than the sugar culture began to flourish, for it meant that sugar was now on the American free list and had before it the immense sugar market of the United States. The coffee trade was not similarly stimulated because coffee had previously been on the free list. Indeed, the imports of Porto Rican coffee lagged for a full decade, no increase occurring until 1910. The cultivation of rice has been greatly diminished, it proving to be a less profitable crop than sugar, and many of the lowlands on which it was formerly grown were utilized for the cultivation of sugar. In 1913 rice valued at over $5,000,000 was imported from the United States. Tobacco, onthe contrary, growing on the highlands, again became an important crop, and much progress was made in the cultivation of Porto Rican fruits.

The increase in the shipments to the United States has depended chiefly upon sugar, the value of sugar imports from Porto Rico rising from $2,449,000 in 1900 to a maximum of $31,544,000 in 1912. The remaining imports from Porto Rico in that year consisted chiefly of coffee, cigars, pineapples, oranges, grapefruit, and coconuts.

The leading exports of American products to the Porto Rican market have consisted of breadstuffs—principally rice and flour—cotton goods, iron and steel wares, meat products, lumber, leather goods, and mineral oils.

(3) A large and growing proportion of the commerce of Porto Rico has been controlled by the United States.[2] In 1830, 27 per cent of the imports of Porto Rico came from the United States; in 1895, 23 per cent; and in 1899, 40 per cent, as compared with 88 per cent in 1906 and 82.5 per cent in 1913. Likewise in 1830, 49 per cent of the total exports of the island were sent to the United States; in 1895, 19 per cent; and in 1899, 34 per cent, as compared with 85 per cent in 1906, and 90 per cent in 1913. Spain, Cuba, France, the British East Indies, Germany, England, Austria, and Canada continued to conduct a small share of the Porto Rican trade, but they were unable to withstand the advantages which the application of the American tariff laws to the foreign trade of Porto Rico, the local establishment of American merchants, the investment of American capital, and the large American market for sugar, tobacco, coffee, and fruits gave to the United States.

[1]U. S. Department of Commerce and Labor, *Commercial America in 1905*, p. 37.

[2]U. S. Department of Commerce and Labor, *Commercial Porto Rico in 1906*, p. 47; *Commercial America in 1905*, p. 38; *Monthly Summary of Commerce and Finance, April 1900*; van Middeldyk, ch. 34; U. S. Bureau of Insular Affairs, *Report of Chief*, 1913, p. 16.

As a part of the United States, Porto Rico has prospered. Trade restrictions have been lessened, a stable government has encouraged capitalists to develop the island's industries, and the control of the hook-worm disease and the other sanitary triumphs of the government have added to the energy and productive activities of the people.

THE TRADE OF THE PHILIPPINE ISLANDS UNDER SPANISH DOMINION.

In the discussion of territorial expansion the attention of the United States has been usually centered largely upon the Philippine Islands. Their geographical location is entirely different from that of the other important island possessions, their trade with the United States has been less, their trade and shipping have been subjected to different regulations, and the islands have been differently governed. Though much commercial progress has been made since December 1898, when the Philippines became an American colony, vastly greater obstacles were encountered than in Alaska, Hawaii, and Porto Rico.

Though a trade of primitive barter had been conducted between the merchants of China and Japan and the natives of the Philippines from "time immemorial,"[1] the trade with Europe did not begin until after 1521, when Magellan discovered the islands and claimed them for Spanish territory. There was scarcely any trade even with Spain until the founding of Manila in 1571, and for many years European nations other than Spain could not trade, except secretly through Siam and India and with Asiatics in command of their vessels.

The first commercial importance of Manila was as an Oriental center of redistribution. From within a year after the founding of the colony by Spain to the second decade of the nineteenth century a trade was conducted between Manila and Mexico, Guatemala, Panama, and Peru.[2] The Philippines were but a link in the trade of Spain with Spanish America. The Spanish-American trade center was Acapulco, Mexico, the Oriental center was Manila, and the only legitimate trade between them was conducted in the state galleons of Spain. Though the Spanish subjects at Manila were prohibited from purchasing wares on the Asiatic mainland, they were permitted to buy such cargoes as were brought to them, and consequently Chinese junks came to Manila, while frequent cargoes arrived from Japan, Siam, India, and Persia. The cargoes obtained in this way were then in many instances carried to Spanish America in Spanish state galleons and exchanged for Mexican coin. Mexican dollars were scattered throughout the Orient on a large scale and they became an index of the importance of Manila as an Oriental trade center. "For two centuries a steady stream of these coins flowed through Manila at the rate of from 250,000 to 3,000,000 Mexican dollars per annum into her commercial connections."[3]

[1] *Census of Philippine Islands*, 1903, I, 346.
[2] Foreman, *The Philippine Islands*, ch. 15; *Census of Philippine Islands 1903*, I, 347; *Official Handbook of the Philippines* (Bureau of Insular Affairs pt. i, 247.
[3] Plehn, "Foreign Markets," in *Journal of Political Economy*, XIII, 1905, p. 19.

As the Philippine trade became greater, it was, at the suggestion of the envious merchants of Cadiz, subjected to severe restrictions by the Spanish Government. Many of these restrictions were maintained for a long period of time, the prohibition of the exportation of China silks to Mexico, for instance, not being removed until 1734. But even for another century, after the abolition of these burdensome regulations, the trade of Manila was, with few exceptions, limited to Spanish merchants. A French firm was given commercial rights at a comparatively early date, and similar privileges were extended to an English house in 1809, but foreign trade as a whole was small, even the Mexican trade being cut off by the declaration of Mexican independence in 1821. It was not until 1834 that the port of Manila was unrestrictedly opened to foreign merchants for trading purposes, and even then American as well as European merchants were at a disadvantage. In 1844 strangers were excluded from the interior of the islands; in 1857 an attempt was made to prohibit foreigners from establishing themselves in the colony; and throughout the entire period of Spanish dominion discriminating tariffs were levied upon foreign goods, and the duties on merchandise in foreign vessels were double the usual Spanish tariff rates.

The direct trade between the United States and the Philippines began about 1796, when one of the ships of the great Salem merchant, Derby, entered the harbor of Manila and obtained a cargo of sugar, pepper, and indigo.[1] In spite of all restrictions this trade continued, and, after the value of Manila hemp, tobacco, sugar, dyewoods, and other native products was discovered, the trade spread to other Atlantic coast ports. The customs records of the United States state the value of the imports from the islands in 1822 to have been $234,568, and show that they steadily increased until 1857, when the value was recorded as $3,653,763. Thereafter the import trade was irregular for more than a decade, but by 1872 it had increased to $7,781,629. Then there was another long period of irregular trading, the highest figure, until the beginning of American control, being that for the year 1884 ($12,339,531) and the lowest that for 1897 ($4,383,740). The value of the American wares exported to the Philippines has always been decidedly less than that of the Philippine products which were imported. In 1830, according to the American customs records, the value of the exports to the Philippines was but $39,129, in 1845, $119,263, and in 1850, $16,817. In 1860 the United States marketed products in the islands valued at $364,608, and after the Civil War the trade continued with great fluctuations until the end of Spanish dominion, the maximum being reached in 1872 ($334,398).[2] As was usual in the early Oriental trade of the United States, payments were made in specie rather than in American merchandise.

[1] Marvin, *American Merchant Marine*, 204.

[2] Includes various other Spanish possessions.

During the earliest period of Philippine commerce practically the entire trade was with Spain and the Oriental countries, but after the opening of Manila in 1834 Spain gradually lost control.[1] By 1855 Manila found her chief markets in the United States, England, Spain, China, and Australia, and twenty years later Spain, China, and Australia had lost ground, while the United States and England had gained and the British East Indies had become an important factor. During the decade preceding 1898, England was the chief customer of the Philippines, the United States, China, Spain, the East Indies, Japan, and France being of less importance. The purchases of the United States were gradually declining. The exports of merchandise to the Philippines from the United States were uniformly unimportant before the acquisition of the islands. Philippine imports were controlled mainly by Great Britain and Spain, while Germany, France, China, Japan, and the East Indies all made greater sales than the United States

THE TRADE OF THE PHILIPPINES SINCE AMERICAN ACQUISITION.

The trade of the Philippine Islands, since they became an American colony in December 1898, has had to overcome many serious obstacles. Being largely dependent upon the agricultural resources of the islands, it has been adversely affected by the many temporary setbacks which have retarded agriculture. In some districts 70 to 90 per cent of the native carabaos, the Philippine oxen, were destroyed by the ravages of war and the "rinderpest;" war also damaged the irrigation works, roads, and farm implements, and for some years there was an insufficient supply of loanable capital, the usual rate of interest to farmers during the first half dozen years of American occupation ranging from 15 to 20 per cent. The land tax, moreover, was unpopular with the Philippine landholders, and wages during the first five years rose from 100 to 150 per cent, whereas the price of farm produce, with the exception of rice, which was largely consumed by the natives, did not rise correspondingly.

The trade of the Philippines, moreover, was subjected to tariff regulations quite different from those applied to the trade of other American colonies. Until 1902 the tariff rates applicable to foreign countries were applied to the trade between the Philippines and the United States, and not only were Philippine exports obliged to pay import duties in the United States or abroad, but in addition certain export duties imposed by the Philippine Commission. On March 8, 1902, Congress enacted a special act which continued the payment of the regular Philippine tariff rates on imports from the United States, but permitted Philippine wares to enter the United States at tariff rates equal to 75 per cent of the duties collected on imports from foreign countries,

---

[1] *The Commercial Philippines in 1906*, p. 33.

and less any Philippine export duties imposed upon shipments from the islands. The act also exempted from the payment of export duties all Philippine wares entering the United States free of duty and coming directly from the islands.

The trade between the United States and the Philippines was not restricted to American vessels, but American ships arriving at American ports from the Philippines were not required to pay tonnage taxes. An act of April 29, 1908, required foreign vessels entering an American port from the Philippines to pay the same tonnage taxes as were paid by vessels entering from foreign countries.

The first far-reaching modification of tariff duties applicable to the trade between the United States and the Philippine Islands was made in the Payne-Aldrich tariff act of August 5, 1909. It provided that American products (except rice) should be admitted into the islands free of duty, provided that no drawback of customs duty had been allowed, that they had been shipped direct, or in bond through Canada or Mexico, and that a properly executed certificate of origin had been presented. It also provided that Philippine products (except rice) should under the same conditions be admitted into the United States free of duty. It specified, however, that the annual imports of Philippine cigars should be limited to 150,000,000 cigars; wrapper and filler tobacco when mixed with over 15 per cent wrapper tobacco to 300,000 pounds; filler tobacco to 1,000,000 pounds; sugar to 300,000 gross tons; and that not more than 20 per cent of the value of imported Philippine manufactures should consist of foreign materials. At the same time the so-called "Colton Act" revised the Philippine tariff act of March 3, 1905, which governed the collection of duties imposed in the islands.

The tariff act of October 3, 1913, further extended the principle of free trade to the commerce between the United States and the Philippine Islands. It removed the limit on the amount of Philippine tobacco and sugar which might be shipped to the United States; it repealed the provision which excepted rice from the free-trade regulations of the Payne-Aldrich act; and it permitted cargoes entitled to free entry to be shipped on a through bill of lading instead of limiting them to direct routes. Though stimulating the trade between the United States and the Philippines, the act of 1913, by abolishing all export duties on articles shipped from the islands, also benefited the trade with foreign nations. The Payne-Aldrich act practically granted a differential to the American importer in that it abolished the export duties on goods entering the United States free of duty and did not prevent the collection of such duties on exports destined to foreign countries.

The modified free trade within certain limits which the Payne-Aldrich act extended to the trade between the United States and the Philippines, together with improvements in agriculture, transportation, currency, and other fields of Philippine industry and finance which had gradually been worked out, resulted in the first rapid advance in the

commerce of the islands after their establishment as an American colony. Shipments to the United States advanced in value from $4,410,000 in 1899 to $11,373,000 in 1903, but then remained static for six years. Shipments from the United States to the islands gradually advanced from $2,636,000 in 1900 to $11,182,000 in 1903, but the increase was largely due to the purchases of commodities intended for consumption by Government troops and public servants stationed in the islands.

Since 1909 the trade between the United States and the Philippines has made rapid progress. Shipments to the United States advanced to $17,318,000 in 1910 and $21,010,000 in 1913, and the imports received from the United States grew to $16,769,000 in 1910 and to $25,361,000 in 1913. In return for cargoes of manila hemp, sugar, cigars, leaf tobacco, and copra, the United States has shipped a multitude of American exports of much the same kind as those shipped to the Hawaiian Islands.

The imports into the United States from 1900 to 1909 consisted very largely of hemp, together with declining quantities of sugar. The shipments of tobacco and sugar had begun to decrease in relative importance even under Spanish rule, and owing to the devastation by insects and disease, the exports of coffee had practically ceased. Since 1909 the hemp trade has lagged, while the sugar, cigar, leaf-tobacco, and copra trade has gradually increased. In 1910 the prices of all these commodities, except hemp, increased, and the condition of the hemp industry has therefore been unsatisfactory. It should also be noticed that, owing to the change in prices, the increase in the volume of Philippine shipments to the United States was less rapid than the advance in their value.

The relative share of the United States in the Philippine trade gradually advanced, after the islands became an American colony, although it has never become as preponderant as in other outlying possessions. While prior to American occupation the United States had for many years been losing ground, the share of the United States in 1905 comprised over 44 per cent of the entire export trade. From then until 1910 the shipments alike to the United States and foreign countries lagged, but since 1910 the shipments to the United States, as well as those to other nations, have made much progress. In 1913 the Bureau of Insular Affairs reported that 63 per cent of all Philippine exports found markets in foreign countries. The relative position of the United States in the Philippine import trade has steadily improved, since the islands became an American dependency. Before the American occupation of the islands, the imports received from the United States averaged from 2 to 4 per cent of the total; those from Great Britain, from 25 to 38 per cent; from Germany, 3 to 6 per cent; Spain, 8 to 24 per cent; China, 10 to 20 per cent; and those from Hongkong and the British East Indies ranged from 10 to 25 per cent. During

the years 1900 to 1905 the American share averaged about 13 per cent (19 per cent in 1905), while the imports from Great Britain averaged about 17 per cent, Spain, 7 per cent, China, 13 per cent, Hongkong, 5 per cent, and the British East Indies 8 per cent, the latter gradually rising to 15 per cent, when a shortage in the Philippine rice crop occurred. In 1913 the imports from foreign countries comprised about 55 per cent of the total import trade of the islands, the share of the United States having risen to nearly 45 per cent. It was not expected that the trade of the Philippine Islands would be so completely dominated by the United States as that of Alaska, Hawaii, and Porto Rico, because the large Oriental population guaranteed a market for substantial quantities of Oriental wares, and the geographical proximity of the islands to Asia and Australia made them a natural market for Australian provisions and breadstuffs and South Asiatic rice.

The commercial value of the Philippines has been almost entirely as a source of direct trade. The building of adequate docks, depots, and warehouses, and the general improvement of harbor facilities has not restored Manila to its former position as a port of redistribution. Many forces have been adverse to a revival of the redistribution trade. Long before American occupation of the Philippines, the course of Oriental trade had changed so radically that such Oriental ports as Hongkong acted as centers of redistribution to Manila, a condition just the reverse of that which had prevailed during the early years of Philippine trade. The distance from the United States to Asiatic markets, moreover, would be greatly increased, if the Manila route were adopted, for "Manila is from two to five days' travel from the great commercial centers of Eastern Asia, over seas proverbially rough and subject to typhoons."[1] Manila as a port of redistribution must compete with numerous Asiatic ports more favorably situated and already well-established in Oriental trade. In Southern Asia are Singapore, Calcutta, and Bagdad; opposite southern China is Hongkong; on the central Chinese seaboard are Shanghai and other Chinese ports; and in northern Asia are the great ports of Japan. The tendency in recent years has been to conduct trade as directly as feasible with the points of consumption instead of through distant commercial depots. To redistribute American wares to the Orient from Manila would be a reversal of the policy which American as well as European merchants have long striven to follow.

COMMERCIAL VALUE OF NON-CONTIGUOUS POSSESSIONS SUMMARIZED.

In times of hostility the non-contiguous possessions of the United States may possibly serve as bases for the protection of the foreign commerce of the United States with the Orient, Central Asia, and South America; and some of them—San Juan, Manila, and Hono-

[1] U. S. Department of Commerce and Labor. *The Commercial Philippines in 1906.*

lulu—may under such conditions also act as points of redistribution. Their chief commercial value, however, though more clearly demonstrated by the past development of some than of others, has on the whole been three-fold:

Taken together, the outlying possessions have become one of the leading sources from which the people of the United States have obtained necessary imports. This has, of course, been of mutual advantage, for the resources of the possession, in order that they might be developed, required large outside markets. The tropical and subtropical products of Hawaii, Porto Rico, and the Philippines—sugar, coffee, fruits, tobacco, hemp, and copra—are commodities for which the United States has provided a large and growing market. Other products are also available, although they have not yet entered the channels of trade on a large scale, such as spices and cabinet-woods. The gold, salmon, and furs of Alaska are, likewise, articles which have found an extensive American market, and there are other Alaskan resources—copper, coal, timber, and fish other than salmon—which have barely been touched. Table 62 shows how the value of domestic wares, excluding Alaskan gold, shipped from the outlying possessions of the United States has rapidly risen from about $35,421,000[1] in 1899, when most of them were acquired, to $128,207,000 in 1913. Though some of this advance was due to a rise in prices, yet it records a rate of increase more rapid than that of the total import trade of the United States with foreign nations. Indeed, an increase of over 260 per cent during the period 1899 to 1913 was equaled or exceeded by the imports received from but few important foreign countries.

The non-contiguous possessions have become an important market for American exports. Being dependent upon their natural resources as their only commercial asset, they have imported outside manufactures and such foodstuffs as they do not themselves produce in sufficient quantities. Those imported from the United States, as is shown in table 62, have grown from $21,692,000 in 1899 to $108,303,000 in 1913, an advance of over 400 per cent. Everywhere, except in the Philippines, the import trade of American dependencies has been almost completely under the control of American exporters. As in the case of the exports shipped from the possessions, this has been to the mutual advantage of both parties, the American exporters finding markets for many of the American wares which have so eagerly sought foreign markets in recent years, and the colonial importers obtaining a supply of needed outside products.

Though the commercial value of the dependencies has been chiefly in their direct trade with the United States, they have in various ways tended to promote the foreign trade and shipping of the United States. Some of them have served as ports of call for vessels engaged in the trade with foreign countries. Honolulu is the port of call

[1]Alaskan shipments estimated at $10,000,000 in 1899.

of one of the big ocean lines operating between San Francisco and the Orient; the routes from the Pacific coast to Australia and New Zealand are by way of Honolulu and Tutuila; and Porto Rican ports are points of call in the South American trade. Their value in this regard is limited by the fact that they are not located on the shortest steamship routes to some of the leading foreign markets. Honolulu is not on the Great Circle route to the Orient, nor is it on either the shortest direct route or the shortest route via San Francisco from the Panama Canal to the Orient. Porto Rico is not on the direct route between the United States and the Panama Canal, and the geographical position of Manila has prevented its use as a port of call in the trade between the United States and continental Asia. The location of Honolulu, San Juan, and Manila has likewise limited their value as centers from which American wares might be distributed to surrounding foreign markets.

TABLE 62.—*Shipments of merchandise between the United States and non-contiguous territories, 1889 to 1913.*[1]

Shipments from the United States to—	1899	1900	1905	1910	1913
Alaska:					
Domestic merchandise	[2]$9,644,000	[2]$18,463,000	$11,228,000	$17,972,000	$20,180,000
Foreign merchandise	([3])	([3])	278,000	698,000	648,000
Total	9,644,000	18,463,000	11,506,000	18,670,000	20,828,000
Hawaii:					
Domestic merchandise	9,007,000	13,078,000	11,644,000	20,289,000	30,412,000
Foreign merchandise	299,000	432,000	110,000	271,000	234,000
Total	9,306,000	13,510,000	11,754,000	20,560,000	30,646,000
Porto Rico:					
Domestic merchandise	2,633,000	4,261,000	13,388,000	26,478,000	32,223,000
Foreign merchandise	52,000	380,000	587,000	620,000	932,000
Total	2,685,000	4,641,000	13,975,000	27,098,000	33,155,000
Philippine Islands:					
Domestic merchandise	401,000	2,636,000	6,198,000	16,769,000	25,361,000
Foreign merchandise	3,000	5,000	2,000	64,000	24,000
Total	404,000	2,641,000	6,200,000	16,833,000	25,385,000
Guam and Tutuila:					
Domestic merchandise	7,000	13,000	70,000	90,000	127,000
Foreign merchandise	....	....	....	....	....
Total	7,000	13,000	70,000	90,000	127,000
Total domestic merchandise	21,692,000	38,451,000	42,528,000	81,598,000	108,303,000
Total foreign merchandise	354,000	817,000	977,000	1,653,000	1,838,000
Grand total	22,046,000	39,268,000	43,505,000	83,251,000	110,141,000

[1]Compiled from Reports of U. S. Department of Commerce. Statistics differ slightly from those contained in reports of War Department and Navy Department.

[2]Estimates. [3]Included in domestic merchandise.

TABLE 62.—*Shipments of merchandise between the United States and non-contiguous territories, 1889 to 1913.*[1]—Continued.

Shipments to the United States from—	1899	1900	1905	1910	1913
Alaska:					
Domestic merchandise...	[2]$10,000,000	[2]$10,000,000	$10,699,000	$12,349,000	$24,015,000
Foreign merchandise.....	([3])	([3])	103,000	91,000	620,000
Total...............	10,000,000	10,000,000	10,802,000	12,440,000	24,635,000
Hawaii:					
Domestic merchandise...	17,831,000	20,708,000	36,069,000	46,161,000	42,652,000
Foreign merchandise.....	([3])	([3])	43,000	22,000	61,000
Total...............	17,831,000	20,708,000	36,112,000	46,183,000	42,713,000
Porto Rico:					
Domestic merchandise...	3,180,000	3,079,000	15,527,000	32,096,000	40,530,000
Foreign merchandise.....	([3])	([3])	106,000	....	9,000
Total...............	3,180,000	3,079,000	15,633,000	32,096,000	40,539,000
Philippine Islands:					
Domestic merchandise...	4,410,000	5,971,000	12,658,000	17,318,000	21,010,000
Foreign merchandise.....	....	....	....	....	....
Total...............	4,410,000	5,971,000	12,658,000	17,318,000	21,010,000
Guam and Tutuila:					
Domestic merchandise...	11,000	1,000	48,000	37,000	([4])
Foreign merchandise.....	....	....	....	....	....
Total...............	....	....	48,000	37,000	....
Total domestic merchandise..	35,432,000	39,759,000	75,001,000	107,961,000	128,207,000
Total foreign merchandise....	....	....	252,000	113,000	690,000
Grand total..........	35,432,000	39,759,000	75,253,000	108,074,000	128,897,000

[1]Compiled from Reports of U. S. Department of Commerce. Statistics differ slightly from those contained in reports of War Department and Navy Department.
[2]Estimates. [3]Included in domestic merchandise.
[4]Not available until final reports are published.

CHAPTER XXIX.

THE ORGANIZATION OF THE FOREIGN TRADE.

Trading companies prior to 1664, 117. The merchant carrier, 117. The common carrier on the ocean, 118. Charter and line services, 119. Steamship lines: organization, consolidations, conferences, 121. International express service, 124. International mail services and payments, 126. Cable and wireless telegraphy, 127. International trade organization, 128. Financing international trade, 130. Marine insurance, 132. Export trade developed by "trusts," 134.

That a growth in the foreign commerce of the United States from a value of $43,000,000 in 1789, when the Federal Government was established, to $4,278,000,000 in the fiscal year of 1913 should have occasioned great changes in trade organization is not surprising. The growth in the volume of shipping, each extension of the range of foreign markets and of the sources from which imports were gathered, each addition to the variety of wares exported and imported, and each widening of the base of international trade increased the complexity of the shipping, marketing, and financial organization which was gradually developed for the safe and effective conduct of foreign commerce.

Some parts of the foreign trade organization are similar to the organization which was evolved to conduct the vast domestic commerce of the country, and therefore need not be fully discussed at this point. The place of the railroads, of the domestic water routes, express companies, and domestic telegraph lines, of banks and credit agencies, of produce exchanges, of the domestic postal service, and of corporations, in the machinery of commerce is described in Volume I, Chapter XVII of this work. It is intended to trace here the development of those phases of trade organization which are distinctively or primarily concerned with foreign commerce.

It is at the great seaports that the commodities entering the foreign trade are concentrated—the exports, for distribution throughout the markets of the world, and the imports, for distribution among the interior markets of the United States. The ports are served by a network of railroads and inland waterways, which connect them with the grain fields, cotton and tobacco plantations, live-stock ranches, factories, mills, mines, and forests, and with the numerous inland markets, where many of the wares brought from abroad are consumed. They are also served by deep-sea vessels of many types and flags. The development of the railroads and inland waterways concerned domestic commerce even more than it did the commerce between the United States and foreign countries, but the services rendered by ocean carriers have been primarily in the foreign trade.

In the early stages of American commerce, the ocean carrier was the individual merchant who occasionally carried freight for his neighbors, but whose chief purpose was to convey his own wares to over-sea countries to exchange them for valuable cargoes of foreign wares and precious metals. The possibilities disclosed by the efforts of these pioneer traders soon led to the organization of large trading-companies such as the British and Dutch West India, London, Plymouth, Massachusetts Bay, and New Amsterdam companies.

These companies were colonization and land companies, but their principal object in many cases was to carry on trade. The charters which they obtained from their home governments frequently gave them the exclusive privilege of trading in certain defined ports of America. But the monopolistic trading rights which they enjoyed came to an end long before the American colonies became a nation. After the Dutch lost control of New Amsterdam, in 1664, the famous trading companies had little part in the trade of the thirteen colonies.

THE MERCHANT CARRIER.

The colonial over-sea trade was, after 1664, conducted almost entirely in vessels which were owned by individual merchants or producers and which were operated in connection with their trading business. Such a trade organization, in which ocean transportation was merely incidental to the trading activities of merchants, or in some cases of producers, required relatively large investments of capital and tended to confine the ocean carrying trade to merchants or producers who had extensive funds at their command. Gradually, each trade district had its wealthy "merchant princes," who owned large fleets of ships in which they carried occasional cargoes for others, but which they utilized chiefly in their own trading enterprises. The names of Winthrop, Endicott, Derby, Peabody, Gray, Abraham Pech, and Stephen Girard became famous as merchant-shippers. There were also merchants whose trading sphere was less extensive, but who nevertheless had sufficient capital to own and operate one or more vessels. Some, too, were owned by producers, notably by the tobacco planters of Virginia; and in some cases trading-vessels were jointly owned and operated by several merchants or producers, who realized they could not well conduct an over-sea trade unless they operated a vessel in connection with their mercantile business.

The services of the American merchant-carriers became especially important during the last half decade prior to the Revolutionary War, and subsequently until the outbreak of the War of 1812. During both of the wars with Great Britain many of their fastest vessels acted as privateers, and during the Napoleonic Wars in Europe they acted as the ocean carriers, not only of the United States, but of England and most West European countries as well. The rise of the Oriental trade

during the period of the Confederation, the revival of foreign trade generally after the Federal Constitution was adopted, and the blockade of European and British ports during the European wars created a situation in which the American merchant carriers reached the climax of their prosperity. In view of the limited volume of the foreign trade, the small tonnage of the vessels then in use, the uncharted condition of the seas, and the uncertainty of the outcome of trading ventures in little-known parts of the world, the wide range of markets frequented by these merchant traders was astounding. In addition to trading in the customary ports of Great Britain, Europe, and the West Indies, they dispatched their vessels to many distant regions—to the East Indies and British India, to China, Japan, and the Philippines, to the Cape of Good Hope and many ports of Africa, to South America, to the Oregon Country, Alaska, and the Hawaiian Islands, to Arabia and Russia.

The organization needed to conduct the trade of the merchant carriers was simple and to a high degree personal. In many instances the master of the vessel was its owner, and often the vessel, though sailed by a hired captain, was accompanied by the owner, who took charge of the trading which he had in mind. The great merchant princes who operated fleets of vessels placed their ships and wares in complete charge of trusted captains, who were skilled traders as well as navigators. A vessel would leave port with quantities of specie, precious metals, and a wide variety of miscellaneous merchandise, and after many months it would return with a cargo of spices, silks, chinaware, or other valuable commodities which would be disposed of at a great profit. In order to make sure that careful attention would be given to trading operations, the merchants usually permitted the master and crew to carry a certain amount of freight on their own account. Sometimes the vessels failed to return; in the little-known seas to which the small ships ventured danger was always lurking. The risks assumed by the merchant-carriers and their vessels were large, as were also the losses and profits resulting from the enterprises which they undertook.

THE COMMON CARRIER ON THE OCEAN.

The War of 1812 marked a turning-point in the organization of the ocean-carrying service. During the expansion of foreign trade which followed the restoration of peace in Europe and America, the merchant-carrier of ocean freight was supplanted by the public carrier, whose function was solely the work of transportation. However, the transition from one type of carrier to the other was not abrupt.[1] The merchant-shippers had frequently accepted cargoes from others in addition to those which they carried for themselves, they had often carried the foreign mails, and they had given passage to the relatively

[1]Smith, *The Ocean Carrier*, 94.

few passengers who desired to travel in those days. Toward the end of the eighteenth century, ship-owners frequently advertised that their vessels would leave for stated destinations and that arrangements for carrying freight and passengers could be made with the masters. Soon permanent vessel agents were stationed at some of the large ports to book cargoes. Gradually, also, the practice of hiring or chartering ocean vessels became more common.[1] As the demand for public carriers became more widespread an increasing number of such vessels made their appearance.

Numerous causes were instrumental in bringing about the transition. As the base of the foreign trade and its volume expanded many new shippers besides the long-established merchant-shippers of the Atlantic seaboard desired to enter the foreign trade. Some of them knew nothing of ocean navigation, and most of them felt little inclined to invest in sailing-vessels a portion of the funds which were needed in their business. The flow of trade, moreover, became more regular, the risk of loss from sailing uncharted seas and trading in unknown lands and the probability of attacks by pirates and of seizure by foreign men-of-war were diminished, and the margin of profits in the carrying trade as a whole became more certain, while profits resulting from individual voyages no longer attained the proportions which they formerly did. These changes made it possible for vessels to be profitably operated as public carriers, and at the same time removed some of the principal reasons which had induced large merchants to own and operate private vessels. The lack of regular means of transporting the foreign mails, which had long been a source of inconvenience and delay, was another factor leading to the use of public carriers, especially of regular lines. The growing demand for passenger accommodations opened a new field to ocean carriers which could scarcely be entered by private vessels built and operated in the interests of merchants who sold and bought wares wherever they believed the market to be the most favorable. Moreover, the gradual increase in the tonnage of ocean carriers, with resulting increase in their cost, made it difficult for merchants to own vessels.

CHARTER AND LINE SERVICES.

Two types of public carriers emerged: (1) the "tramp" or chartered vessel, and (2) the regular ocean line. The line of demarcation between the services of these two types can not always be readily drawn, because vessels are frequently chartered by navigation companies to be operated in the line service. Ordinarily, however, a "tramp" is an individual ship which is chartered to shippers, either for a trip or for a stated period of time, is operated on no definite schedule and no regular route, while an ocean line comprises a number of vessels

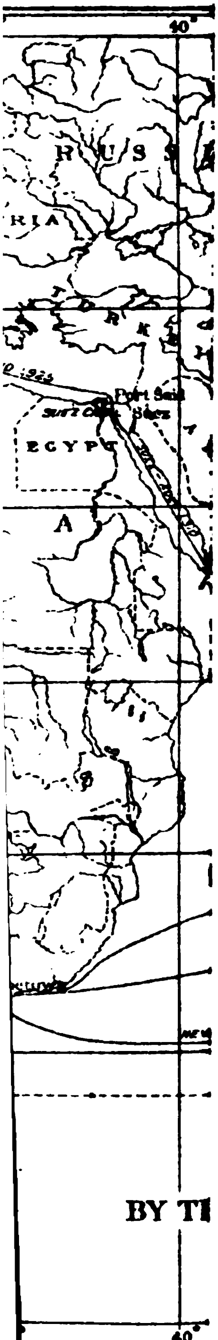
[1] Smith, *The Ocean Carrier*, 94; also Johnson, *Ocean and Inland Water Transportation*, 129–130.

operated regularly, between specified terminals, on a definite schedule. "Tramps" seek cargoes wherever they are available and deliver them anywhere in the world at ports which are not physically or legally closed to them.

These individual or tramp vessels were the first to render a public carrying service. Originally they carried freight of all kinds, passengers, and the foreign mails, but the rise of navigation lines gradually narrowed their field of operation. Wherever lines were established the tramp vessels were deprived of the mails, the passenger business, and the miscellaneous freight cargoes which required rapid delivery or comprised less than a complete vessel-load. The operations of the tramps remain of great importance to the foreign trade, but they are mainly limited to the transportation of full vessel-loads of bulky freight —grain, lumber and lumber products, coal, ore, phosphate rock, and similar low-grade materials, and occasional shipments of heavy iron and steel manufactures. The tramps find most of their cargoes in those ports and in those regions of the world where the steamship lines are least numerous. At the great port of New York, for instance, which is the American center of steamship lines, even the grain exports are for the most part carried by the vessels of regular lines instead of by tramp vessels.

The tramp service, which was originally managed by vessel masters or owners, who advertised for and secured cargoes for their vessels either through their own efforts or in some instances through agents employed for that purpose, gradually came under the direction of ship-brokers. Upon payment of a commission it became the function of these brokers, at all the leading ports of the world, to find cargoes for ships and ships for cargoes, to facilitate the drawing of charter "parties," and in some cases to make temporary advances to ship-masters, so as to enable them to make whatever payments of wages and other expenses it might be necessary to pay before obtaining a cargo. The world-wide connections which these ship-brokers established made the tramp service exceedingly mobile. Without maintaining permanent agents, offices, warehouses, or docks, and without advertising, the owners of chartered vessels were enabled to accept cargoes for any reasonably important destination, and know that upon arrival a ship-broker would instruct them where other cargoes could be secured.

As the volume of trade with Great Britain and Europe, and later with many other parts of the world, became heavier and more regular, something more than individual vessels became necessary. The transportation of passengers, the mails, and likewise high-grade merchandise required a regularity, rapidity, and convenience which the tramp service was inherently incapable of providing. Efforts to establish transatlantic lines were made even before the Revolutionary War, but the vessels advertised to operate in lines rendered no regular or line


40°
R U S S
R I A
Port Said
Suez
E G Y P T
A
BY TI
40°

service. There is no evidence that any real ocean line was established in the American trade earlier than 1816, when the Black Ball Line began regular monthly sailings between New York and Liverpool. Numerous other transatlantic lines soon followed. They were known as "packet lines," and the most famous of them consisted of American sailing-vessels.

STEAMSHIP LINES—ORGANIZATION, CONSOLIDATIONS, CONFERENCES.

However, these sailing-packet lines never obtained control of the deep-sea business. Many of the famous "clipper ships" of the period from 1840 to 1850 did not operate in the line service, and from the year 1840 and thereafter the sailing-packet line began to feel the more serious competition of the growing number of steamships, which operated in both the line and the tramp service. The first vessel to cross the Atlantic with aid of steam was the *Savannah*, a sailing packet equipped with engines and paddle-wheels, which made the trip in 1819. It was not till 1833 that a vessel, the *Royal William*, made the transatlantic trip entirely by steam power. Though steam-vessels were for several years confined in their operations chiefly to the inland and coastwise trade of the United States and Europe, they were gradually introduced into the ocean service in larger and larger numbers, and eventually they gained the ascendancy over the sailing-vessels. The sailing-packet lines and the tramp sailing-vessels also, even the fast and well-built clippers, reached the point of their highest prosperity about 1855, and thereafter their relative position in the ocean carrying trade steadily declined.

The rise of ocean steamers and, after the Civil War, the use of iron and steel rather than wood in steamship construction, were greatly instrumental in the decline of the American ocean carrying trade.[1] After 1861 more and more of the foreign trade of the United States was carried in the ships of Great Britain and other foreign countries. The gross tonnage of the American deep-sea merchant fleet fell from 2,497,000 in 1861 to 782,500 in 1910, and the proportion of the total foreign trade of the United States carried in American vessels during the same yeats fell from 65.2 to 8.7 per cent. During the years when the sailing packets and clippers had been of greatest importance, from 69.5 to 92.5 per cent of the entire foreign trade had been carried in American vessels. The importance of the American flag in the foreign trade declined soonest in the line service, as it was this service that was first taken over by the steamships. Various efforts were made to maintain the American flag, a notable steamship war being waged in the years from 1850 to 1858 between the Collins Line (American) and the Cunard Line (British), but gradually the foreign trade came to depend very largely upon the steamships of foreign countries.

[1] See chap. xxvi, pp. 84–85, for discussion of the causes of the decline in the American ocean marine.

Wherever the volume of the traffic is large enough and the flow of trade or travel sufficiently regular to warrant the establishment of a regular service, the steamship lines have crowded out the tramp service. They operate over definite routes, adhere to fixed schedules so far as possible, and operate steamers which on the whole are larger and faster and are equipped with more conveniences than those which ply in the tramp service. Some steamship lines confine themselves to a strictly freight service, but a larger number operate combination steamers which carry both freight and passengers. The regular cargoes of the great ocean liners consist of passengers, mail, express traffic, and a large variety of high-grade freight. Frequently they also accept partial cargoes of grain and other bulky freight, especially at those great world ports where so many steamship lines operate that the volume of freight, bulky or otherwise, is insufficient to fill the cargo space of all the steamers.

The organization of the steamship-line service is more complex than that of the tramp service. Steamship lines require an extensive business organization, with executive and corporate, operating, and traffic officials. They require permanent agents at the ports in which they operate and throughout the interior of the countries which they serve; they conduct advertising campaigns, they operate warehouses, and where public docks are not available they usually own or lease permanent docks. At some American ports they have entered into agreements with connecting railroad carriers with regard to the use of terminal facilities and the interchange of traffic.[1] Operating on definite routes, they have also seen fit to enter into contracts with bunker-coal companies, which at contract prices provide them with fuel. Some lines provide themselves with fuel, but most of the hundreds of coaling stations which have gradually been established throughout the world are operated by coaling companies, which sell fuel to steamship lines under contract and to tramps at somewhat higher current prices.[2]

From small packet lines operating between two terminal ports, the line service has developed into huge steamship lines made up of trunk lines and branch lines or feeders. In many respects they have come to resemble the large railroad systems of the United States, the main trunk lines which connect the great ocean terminals of the world being fed not only by railroads, canals, inland waterways, and smaller independent steamship lines, but also by affiliated and subsidiary branch lines which operate in direct connection with the ocean trunk lines. The Hamburg-American Packet Company, for example, operates 70 different services, touching at 300 ports of the world. The tonnage of this line, which began with a few sailing-vessels in 1847, grew to more than 200,000 tons in 1893; 736,000 in 1905, and 1,360,360 in 1913.

[1] S. S. Huebner, *Report on Steamship Agreements and Affiliations in the American Foreign and Domestic Trade.* (Report of House Committee on the Merchant Marine and Fisheries, 63 Cong., 1914, IV, chap. ix.)

[2] Johnson, *Panama Canal Traffic and Tolls*, chap. x.

The North German Lloyd, which began operation in 1857 with three steamers, had, in 1913, a fleet of over 825,000 tons, and the Royal Mail Steam Packet Company operated fleets totaling 1,380,500 tons.

These enormous fleets, which were brought together by individual navigation companies, partly through the purchase, construction, and chartering of steamers and partly by amalgamation with or by purchasing controlling interests in lines which formerly were independent, disclose but one phase of the organization of the line service. Another phase of steamship organization is the widespread control, by agreements and conferences, of the competition which originally existed between the various lines. From the standpoint of ease of control, the line service differs essentially from the tramp service. There are thousands of tramps, which operate independently of each other, with the entire ocean or large parts of it as their highway, but the number of lines is limited and their activities are confined to definite ports and ocean routes. Though tramp agreements and associations have not been entirely lacking in the foreign trade of the United States, the services and rates of the chartered sailing-vessels and steamers have always been relatively free from restraint and largely subject to competition among the tramp vessels themselves and, for certain kinds of traffic, with the regular navigation lines. In the line service, on the contrary, the number of conferences and agreements has steadily increased. These agreements vary from oral understandings to written contracts. There are agreements concerning fixed, minimum, and differential rates and fares; the apportionment of traffic by allotting the ports of sailing or by restricting the number of sailings; the limitation of the volume of freight which each line may carry; the pooling of all or a portion of the freight or passenger earnings of the various lines; the depositing of stipulated sums as a guarantee of good faith; and the relations between conferences or between conference and non-conference lines. There are deferred rebate systems, understandings as to the use of fighting-ships against competing lines, contracts with shippers, and in some cases agreements with American railroads.[1] In a Government investigation of steamship agreements which was made in 1912 and 1913 it was found that there were 80 steamship agreements and conferences in the foreign trade of the United States, and "that as regards nearly every foreign trade-route practically all the established lines operating to and from American ports work in harmonious cooperation, either through written or oral agreements, conference arrangements, or "gentlemen's understandings." The few instances where two or more lines serve the same route and have denied the existence of written or oral agreements for the regulation of the trade are exceptions and not the rule."[2]

[1]For detailed statement see S. S. Huebner, *Report on Steamship Agreements and Affiliations in the American Foreign and Domestic Trade.* (Report of House Committee on the Merchant Marine and Fisheries, 63 Cong., 1914, IV, chap. x.)

[2]*Ibid.*, p. 281.

In addition to the services of the steamship lines and ocean tramps, a third class of ocean service has arisen—that offered by the private bulk-carriers. It is curious that in recent years there should again be a tendency on the part of large shippers to operate vessels in connection with their mercantile or producing industries, similar to the practice of the old merchant-carriers. The more recent use of privately operated vessels has been mainly on the part of large producers in some of the great industries which have bulky products to distribute or require bulky raw materials. Thus many private bulk-carriers are used to transport oil, lumber, coal, ore, asphalt, building materials, lime, and heavy iron and steel products.

The line of demarcation between private and public carriers is difficult to draw, since many of the vessels which are operated by industrial concerns, acting primarily as private carriers, also carry for hire occasional cargoes of freight. It is especially difficult to classify those steamship lines which are operated by mercantile concerns, but which regularly carry freight for others, and even passengers, express goods, and foreign mails. Such, for instance, is the practice of the great fleet of fruit steamers operated by the United Fruit Company. It is noteworthy also that some of the regular steamship lines serving the United States have for many years been operated in connection with some of the large export and import houses of the port of New York. Vessels of this kind are ordinarily classed as public carriers, the term private bulk-carrier being applied to such individual vessels as are operated by industrial concerns in direct connection with and primarily in the interest of the industries which they serve.

INTERNATIONAL EXPRESS SERVICE.

Though the ocean and inland carriers which transport the wares annually exchanged between the United States and foreign countries have been the principal factor in the machinery of the organization of foreign commerce, numerous shipping and transportation agencies have been developed, which occupy an important position. In 1840, shortly after Mr. William F. Harnden had founded the first domestic express line in the United States, this pioneer expressman established an international express service. Harnden and Company established agencies in the leading cities of England, France, Scotland, Ireland, and Germany, and not only was a regular express business conducted, but arrangements were made whereby the company could draw bills of exchange either upon its foreign agents or upon foreign banks.[1] The company also became a popular immigrant agency, arrangements being made with a large packet-ship line and with numerous Erie Canal boat lines for the cheap carriage to the West of the many European immigrants who were solicited by passenger agents employed for that pur-

[1] Stimson, *History of the Express Business*, 44.

pose. Mr. Stimson states that "Harnden & Co. underrated the value of their home expresses, so full were their minds of the superior magnitude of their foreign operations. They were receiving and sending to the West scores of ship-loads of emigrants, and actually had under their control the bulk of the foreign passenger business." Soon after the death of Mr. Harnden the domestic express lines of the company were disposed of; the foreign passenger business was discontinued and Harnden & Co. confined their efforts to conducting a foreign banking and commission business.

After 1851, when the new proprietors of Harnden & Co. failed, foreign express services were conducted by some of the large domestic express companies. The foreign business, however, being limited in volume, was gradually confined to but four of these companies—the American, United States,[1] Wells-Fargo, and Adams. The first three conducted their international business through foreign departments, while the Adams Express Company conducted a European service through a subsidiary concern, the Morris European and American Express Company. The methods of performing the foreign express service differ widely from those which have been developed in the domestic service, in that the companies ship at current ocean rates instead of making term contracts with the steamship lines, and in that they have ordinarily operated through forwarding agents in Europe and elsewhere instead of through their own express agents.

Much of the international express business has for many years been handled by the regular freight forwarders, who engage in the business of forwarding all kinds of freight for American shippers. These forwarding concerns, which are located at all the large ocean ports of the United States, have for many years been among the leading international shipping agencies. In the absence of through rail and water routes and through bills of lading it frequently becomes necessary that shippers or consignees should have representatives at the ocean ports to see that their freight is transferred between the rail and water carriers, that shipping papers are properly executed, marine insurance is obtained, and that all other shipping requirements are fulfilled. The freight forwarders, who see that shipments are properly forwarded to destination, frequently cooperate with other shipping and transportation agencies. Thus they may engage trucking or cartage companies to cart the freight which is being shipped, lighterage companies to perform lighterage services, steam or electric cranes to handle heavy articles, custom-house brokers to clear imported wares at the customhouse, and foreign freight forwarders to forward cargoes to interior destinations, after they arrive at foreign ports. The work of freight forwarding is frequently performed for the shipper or importer by agents permanently employed for that purpose or by the various importing

[1] The United States Express Company discontinued services in 1914.

and exporting concerns which conduct an international trade. Some shipments between the interior of the United States and foreign countries, moreover, are made on through bills of lading, the carriers themselves in that case forwarding the freight to destination. The operations of the freight forwarders have consequently been narrowed, but they will doubtless remain a part of the foreign-trade organization so long as the carriers generally fail to establish through rail and water routes and refuse to issue through export and import bills of lading.

INTERNATIONAL MAIL SERVICES AND PAYMENTS.

One of the earliest difficulties encountered in the foreign trade was the delay, uncertainty, and expense of the international mail service. Though provision was at various times made in the colonies for the conduct of a domestic mail service and for the carriage of international mails to and from the ports, concessions being granted to certain persons at various times,[1] the mails were frequently conveyed and handled privately by stage-drivers, tavern-keepers, merchants, travelers, and vessel captains. It was a common practice for a tavern-keeper at New York to hang up a coffee bag for letters destined to foreign countries, the letters being placed under the care of vessel captains who called for them and who also delivered to the tavern-keepers such mails as they brought from abroad. After the establishment of a general postal union in 1775, under Benjamin Franklin, and the organization of the Post Office Department with a postmaster-general at its head in 1789, the foreign mail service was gradually improved. Until 1816, however, all the foreign mails were dependent upon the sailings of individual ocean vessels. The rise of the ocean line service since that time has given the foreign mails a regularity which was formerly unknown, but it was many years before all the commercial countries of the world were connected with the United States by navigation lines.

In the absence of mail contracts, the vessels carrying the foreign mails have been paid in accordance with the amount of mail carried. Mail contracts have, however, been authorized at various times as a means of insuring improved mail services and of subsidizing American steamship lines. During the period 1845 to 1858 the United States Government entered into mail contracts with a number of lines, the largest sums being paid to the famous Collins line, and smaller amounts to the Ocean Steam Navigation Company, the New York and Havre Steam Navigation Company, the United States Mail Company, the Pacific Mail Steamship Company, the Empire City Line, and Mr. M. C. Mordecai.[2] The policy of mail subsidy was abandoned in 1858, after $14,500,000 had been paid out under these mail contracts.

After the Civil War Congress made provisions for mail contracts

[1]Woolley, "Early History of the Colonial Post Office," in Publications Rhode Island Historical Society, 1894.

[2]Keiler, *American Shipping*, 66–73.

with three ocean lines, one operating from New York to Brazil, one from San Francisco to Hawaii, and the other from San Francisco to China and Japan. From 1877, when the last of these contracts expired, until 1891 the foreign mails were carried without contracts. At present they are handled partly by steamers operating under the mail-contract act of March 3, 1891, and partly by steamship lines which are paid all or a portion of the postage received by the United States from the mail carried. The six American lines which in 1913 were operated under contract were paid in accordance with the length of their routes, and the tonnage, speed, and structural material of their steamers. In 1912, $3,917,000 was paid for the transportation of the foreign mails, $983,160 being paid to steamship lines operating under contract.

The development of the international postal service has been greatly aided by the Universal Postal Union, which was established by international treaty in 1874. The Postal Union rates have since then applied to the mails sent from the United States to all foreign countries except those with which special arrangements have been made. The postal rates to an increasing number of countries have been reduced below the Postal Union charges, and the United States has also entered into parcel-post arrangements with forty-seven countries, the agreements ordinarily providing for the mailing of parcels with a maximum weight of either 4 pounds 6 ounces or 11 pounds.

CABLE AND WIRELESS TELEGRAPHY.

As in the case of trade within the United States, the foreign trade was greatly facilitated by the establishment of the telegraph service. Efforts to transmit signals commercially through wires laid under water were made as early as 1839, but the first submarine cable of any length was laid in 1847 from Dover, England, to Calais, France. It was not until numerous short lengths of cable had been laid in various parts of the world that the establishment of a transatlantic telegraph service was undertaken. The first transatlantic cable was laid in 1858 between Ireland and Newfoundland, but after successful operation for a few weeks, during which some 200 messages were transmitted, it parted. Owing to the courage and perseverance of Cyrus W. Field and his associates, who promoted this project, a second cable was laid in 1865, but it broke in deep water before completion. In the following year, however, a third cable was laid, this time successfully, and also the cable which had broken in the previous year was recovered and repaired. Since 1866 there has been continuous progress in the construction of submarine cables between the United States and foreign nations. Telegraph companies doing business in the United States operate over 46,300 miles of cables, the most important lines being the five transatlantic cables, the Pacific cable which connects San Francisco with Honolulu, Midway Island, Guam, the Philippines, China,

and Japan; the New York-Havana cable; and the New York-Colon cable. Throughout the world, as a whole, nearly 252,500 miles of ocean cable were in operation in 1904, Great Britain being the leading operator, followed by the United States, France, Denmark, and Germany. By making possible the telegraphic quoting of prices and terms, the reporting of sales on grain and cotton exchanges, the making of direct sales and gradual elimination of middlemen, the rapid transmission of news concerning market conditions, and the rapid adjustment of misunderstandings, and by facilitating international settlements, the submarine cables became one of the most important factors in the organization of the foreign trade.

The ocean cable service has since 1902 been supplemented increasingly by wireless telegraphy. The first transatlantic signal was transmitted by wireless apparatus in 1901 by Mr. G. Marconi, and in the following year complete messages were transmitted between St. Johns, Newfoundland, and Poldhu, Cornwall. For a time the Marconi transatlantic service was confined to news matter, but on October 17, 1907, a limited commercial service became available. Not only has the commercial usefulness of the international wireless service been extended, but the United States and foreign governments are now using it for naval, military, and governmental purposes; and deep-sea merchant-vessels throughout the world have been fitted with wireless apparatus. The use of wireless telegraphy in reporting the location of and in transmitting orders to merchant vessels, and especially in the work of rescuing freight and passenger vessels which are in serious distress, has proved to be a vast benefit alike to ocean carriers, international trade, and foreign travel.

INTERNATIONAL TRADE ORGANIZATION.

Modifications in the organization for exporting and importing, the methods of purchase and sale in the foreign trade, were on the whole made less rapidly than in the domestic trade, but great improvements have nevertheless taken place. During the period of the merchant carrier, trade methods were essentially simple, exports being generally made directly by producers or by merchants, who handled exports on their own account and shipped them in their own vessels, and the import trade for the most part being handled by the same merchant carriers. When the reasons for this simple direct organization ceased, it was gradually superseded by one involving the employment of public carriers and a number of commissionmen, factors, and other middlemen.

In many transactions middlemen performed valuable commercial services, especially in case of small importers and exporters who could not command sufficient initial capital to establish a direct trade organization. Export commission houses continue to this day to handle a substantial share of the foreign trade. Working on a commission basis they receive orders from abroad, fill the orders as desired, and in some

cases take complete charge of the details of shipping and financial settlement. Some export commission houses have, moreover, extended this service so as to conduct selling organizations, either sending salesmen abroad or establishing foreign branch houses. Some of them confine their activities to special commodities, others accept orders for all kinds of American wares, and some conduct an import as well as an export business.

The general tendency in the foreign trade in agricultural products has in recent years been toward the establishment of an organized export market, a movement which has been stimulated by the establishment of organized exchanges and the widespread use of the ocean cable. The activities of the grain and cotton exchanges which are discussed in Vol. I, Chapter XVII, are not confined to the domestic trade. Similar exchanges have been established abroad, and the cable has made possible the daily quoting of prices and the transmission of orders. Export transactions may also be "hedged" by the purchase and sale of future contracts in the same way that domestic transactions are protected. The commissionmen still play their part in the export grain-trade. They handle much of the grain which is shipped to the great primary grain-centers of the Middle West from the country elevators, and some of this grain they ship abroad. A relatively larger share of the foreign grain trade has, however, since the later eighties, been handled by the great central elevator men and by grain dealers and export concerns who may purchase their supply either privately in the Central West or at the ports of exportation.

The break-up of the large cotton plantations after the Civil War resulted in the organization of a system of many middlemen to handle the cotton trade, but later some of the middlemen were eliminated. Though local dealers still occupy an important place in the cotton trade in parts of the eastern cotton-belt, most of the export trade has fallen into the hands of cotton-exporting concerns, whose agents at many points purchase the cotton direct from the grower. One of the purposes of the cotton growers' unions which have been organized is further to remove middlemen from the cotton trade.

The cattle-export trade has also been well organized, most of the cattle being exported by the large meat-packing companies of the Central West and by cattle-exporting concerns. These exporters purchase cattle at the central live-stock yards to which cattle are shipped directly by the growers or feeders, the purchases being made through brokers in accordance with the rules of organized live-stock exchanges. The local cattle dealer has remained only in those parts of the country where the beef-cattle industry is relatively unimportant.

Commission houses still handle much of the foreign non-agricultural trade, but since the later nineties, when the export trade in manufactures became an important branch of the foreign trade, other (usually more direct) methods of exporting have been developed in

many quarters. Numerous export houses have been organized for the express purpose of purchasing American wares and exporting them on their own account. Some of them handle but one kind of article, for instance, some exporting concerns deal only in cotton textiles. Others purchase a large variety of goods and ship them to foreign markets in many parts of the world, and some of them are importers as well as exporters. Many so-called "manufacturers' export agents" have, moreover, entered the export trade, their function being to act as agents and salesmen for manufacturers. Ordinarily they work on a salary basis, although sometimes a commission is charged, and any one of them may act for many different manufacturers of non-competing lines of wares. They solicit orders from export companies, export commission houses, and agents of foreign importers, and in some cases they endeavor to find customers abroad. Some of them take full charge of their customer's foreign business—selling, shipping, and collection.

Direct foreign sales are frequently made to those foreign importers who have established branch houses or agents in the United States, the agents sometimes buying directly from the American producer. Likewise an increasing number of shipments are made directly to foreign countries by American manufacturers. Their foreign sales arrangements differ widely.[1] Many shipments have been consigned to foreign merchants and jobbers, who dispose of them on their own account, and others have been consigned to foreign commission agents, who handle them on a commission basis. The tendency on the part of the largest exporting manufacturers is to establish their own foreign selling organization, either by sending out salesmen or opening branch houses abroad. Many of the American exports which have been especially successful in foreign markets, as refined oils, agricultural implements, steel wares, cash registers, typewriters, meat products, tobacco, and others, have in recent years been sold abroad by American salesmen and branch houses. Exporters who feel unable to open their own foreign establishments have frequently utilized the service of "combination salesmen," who handle the non-competing wares of various manufacturers. They act as the exporters' agents, using the names, letterheads, and invoice blanks of their employers.

FINANCING INTERNATIONAL TRADE.

Still another phase of foreign trade organization was the development of the machinery for financing exports and imports. During the colonial era and for some years later a considerable portion of the foreign trade required no detailed methods of settlement, because the great merchant-shippers commonly made a direct exchange of American wares for foreign wares, their profit arising from the sale of the imports which

[1] Hough, *Elementary Lessons in Exporting*, 39: *Ocean Traffic and Trade*, chaps. xiii, xiv.

they brought to America. Frequently also they would carry with them on the outward voyage specie and bullion or (in the case of the Oriental and Philippine trades) Mexican dollars, to pay for the foreign wares which they purchased. In the well-developed trade with Great Britain, some of the European countries, and the West Indies, all of these practices prevailed to some extent, but banking methods were here more commonly applied. Bills of exchange had been used in Europe since the thirteenth century,[1] and they were used to some extent in the early foreign commerce of America. However, it was only gradually, after the international commerce of the world was better organized and international banking arrangements were generally established, that bills of exchange became the common method of international settlement.

Various types of bills of exchange have been evolved, the two great classes being those which are drawn on a bank or banker, and those drawn directly on the purchaser of the exported or imported wares. The former class is, on the whole, the most commonly used, for the buyers and sellers of the wares in the foreign trade are frequently almost unknown to each other. This method of financing ordinarily implies the establishment of bankers' credit with some large banking-house, usually at London, Paris, or New York, the shipper being notified that the bank will accept for payment bills of exchange with documents attached up to a specified amount. In the Chinese and Japanese export trade the bankers' credit is sometimes displayed by so-called letters of credit, which do not signify that credit has actually been opened, but are merely an advice to the London, Paris, or New York banks from their Chinese or Japanese correspondents that the drawee is regarded as "good for the amount and likely to honor such drafts."[2] Many bills of exchange are drawn directly on the buyer of the exported or imported wares, although they are, of course, negotiated through banks. They must have attached to them, as must also the drafts drawn on banks, the order bill of lading which represents the wares, indorsed by the shipper, an invoice, and an indorsed insurance certificate. They may be payable at sight or at 30, 60, or 90 days or any other period, thus constituting a safe method of extending credit to foreign buyers. Time drafts, moreover, may be either "D. P." or "D. A.," that is "documents for payment" or "documents for acceptance." The consignee, before he can obtain the wares from the carrier, must present the indorsed order bill of lading, and this he can not do until he makes satisfactory arrangements at the bank to which the bill of lading and draft have been sent. In the one case he is required to pay the amount of the bill of exchange before obtaining the bill of lading, while in the other it is given to him upon his formally accepting the draft for payment at the time when it will fall due.

[1] Day, *History of Commerce*, 120. [2] Hough, *Elementary Lessons in Exporting*, 99.

It is estimated that 75 per cent[1] of the foreign trade is transacted subject to the terms of documentary bills of exchange; the remainder is transacted in a variety of ways. Open accounts are sometimes established when buyer and seller are well known to each other, collections being made at certain specified times. Large business concerns of good standing sometimes utilize two or three months' bills drawn on a European bank or banker as a commercial credit. No documents are required in this transaction, the banker merely accepting the bills drawn on him with the understanding that his customer will supply the necessary funds before the bills fall due. Sometimes so-called "finance bills" are used,[2] but their only importance in the foreign trade of the United States is in case of those drawn by American firms on their own European branch houses. Such bills, which are then known as "house bills," have been popular in the past, but in recent years, owing to antagonism on the part of European discounters, they have been used less freely.

MARINE INSURANCE.

The foreign trade organization would be very incomplete without means of insuring the cargoes shipped abroad, the freight due on cargoes, and the vessels in which they are carried. The many risks incurred in deep-sea shipping and the limited liability of the ocean carriers in case of loss or damage make it essential that shippers should protect themselves by taking out marine-insurance policies. The most approved methods of international settlement, moreover, require that a marine-insurance policy or certificate shall accompany the bill of exchange, invoice, and bill of lading. It is stated that marine insurance was practiced many centuries before the origin of other forms of insurance.[3]

The development of marine insurance in the United States is divisible into four main periods.[4] During the first period, which extended throughout the colonial era and until 1793, marine insurance was written by personal underwriters, and American shippers and vessel-owners depended very largely upon the private underwriters of Great Britain. The first marine insurance office in Philadelphia was not established until 1721, and the first one in New York not until 1759. The organization at Philadelphia of the Insurance Company of North America in 1794 marks the beginning of the second period. This period, which extended to 1840, was characterized by the rise of corporate underwriters and by great fluctuations in the volume and condition of their business. The marine insurance business, a large share of which

[1]Hough, *Elementary Lessons in Exporting*, 99.
[2]Warburg, *The Discount System in Europe*, 12. (Publications, National Monetary Commission.)
[3]S. S. Huebner, "Development of Marine Insurance," in *Annals of American Academy of Political and Social Science*, Sept. 1905, p. 243.
[4]*Ibid.*, 252.

was conducted by American insurance companies, was greatly influenced by the fluctuations which occurred in the foreign trade, by the increased competition between marine underwriters, the incomplete knowledge of sound insurance methods, and by the Napoleonic wars. The extraordinary losses by capture and detention during these wars depleted the resources of many insurance companies.

The twenty years following 1840 constituted the third or "golden period" of American marine insurance. The growth of the American ocean marine and of American trade and shipping, the increasing number of long voyages, and the high insurance rates which prevailed gave a strong impetus to the growth of the marine insurance business in the United States. This prosperous epoch was followed by one of gradual but almost continuous decline in American marine insurance. As is elsewhere stated, the deep-sea merchant fleet of the United States passed through a long period of decline which extended from the Civil War to 1913—a decline which was for some years furthered by British marine underwriters, who pursued a policy of giving preference in insurance rates to British vessels. Meanwhile, the amount of foreign competition steadily increased, foreign underwriters no longer being satisfied with such American business as came to them. During the decade beginning in 1870 they began to invade the field of American marine-insurance companies by establishing offices in the United States. In late years much the larger share of marine insurance of the United States as a whole has been written by foreign underwriters. Indeed, there are now but seven domestic companies which do a large business, and of these but one confines its activities to marine insurance. Unlike the foreign companies operating in the United States, but five American companies do an exclusively marine-insurance business, all the others depending largely or partly upon fire insurance.[1] In the United States, as throughout the world, Lloyds' Association of London has become the controlling marine-insurance organization. Since the seventeenth century this organization has developed into the world's leading marine-insurance exchange, providing the information necessary to conduct the marine-insurance business intelligently, the regulations governing the business conduct of the members, the quarters where its members may conveniently insure risks, the rules governing the construction of vessels, and a large staff of surveyors and agents, who inspect and classify vessels at the leading ports of Great Britain, the United States, and elsewhere.

In recent years there has been a tendency, especially on the part of large ocean navigation companies, toward self-insurance. Marine-insurance companies, however, continue to underwrite the ocean cargoes, the vessels of practically all the smaller lines, the almost number-

[1] S. S. Huebner, "Development of Marine Insurance," in *Annals of American Academy of Political and Social Science*, Sept. 1905, pp. 267–69.

less tramps which roam the seas, the vessels of the many large lines which have not inaugurated the policies of self-insurance, and a portion of the risk of the great ocean lines which partially insure their vessels in self-insurance funds.

In the discussion of domestic trade, rather than of foreign commerce, the rise of large industrial corporations or so-called "trusts" was treated because their main activities have been in production and marketing within the United States. From 1890 to 1899, however, when manufacturers became important in the foreign trade, their activities were extended to foreign markets. Indeed, a large share of the success of the United States in exporting manufactures has been due to the efforts of large corporations. So long as the exports of the country consisted largely of foodstuffs and raw materials which were needed in European countries, there was little difficulty in finding foreign markets; but in the development of markets for American manufactures in competition with foreign exporters the difficulties have increased many fold, with the result that the large corporations have led and the smaller shippers have followed in their wake.

With few exceptions only the largest shippers have been able to develop a direct exporting organization, with salesmen and branch houses in the field, to undertake expensive foreign campaigns, and to bring American wares effectively before foreign buyers who were in the habit of buying from European exporters. Some of them have undertaken the operation of large fleets of ocean-going vessels, for the purpose of reducing freight costs and guaranteeing a direct transportation service.

CHAPTER XXX.

COMMERCIAL TREATIES OF THE UNITED STATES.

General commercial and navigation treaties, 135. Most-favored-nation clause, 137. The treatment of shipping, 138. Special commercial treaties and agreements, 140. Treaties concerning river and lake navigation, 141. Treaties regarding interoceanic canals, 141. Concerning Canadian canals, 143. Special trade reciprocity treaties, 144. Commercial treaties with China, 145. Commercial treaties with Japan, 149. International conventions, agreements, unions, and other acts, 152.

Nations engage in commerce with each other in consequence of the rights and privileges which they may grant to each other. This privilege of foreign trade which one country grants to another may be, and frequently is, extended by courtesy, but it is commonly granted in formally proclaimed treaties, agreements, conventions, or other international acts. In the same way the conduct of special matters relating to commerce and shipping, such as the collection of tariff duties, the interchange of consuls, and the protection of patents, copyrights, and trademarks, may at times be left to international courtesy, with entirely satisfactory results, but such matters are nevertheless commonly regulated by treaty. When a trade privilege is granted by one nation to another in a treaty, it then becomes a treaty right which is legally binding and may properly be enforced.

Commercial treaties,[1] agreements, conventions, etc., may conveniently be classified as (1) general "commerce and navigation treaties," (2) special commercial treaties, (3) commercial treaties with certain countries, the trade customs of which differ from those ordinarily prevailing in international trade, and (4) international conventions, agreements, or other acts to which many nations are parties.

GENERAL COMMERCIAL AND NAVIGATION TREATIES.

Hardly had the United States broken away from Great Britain before the newly established nation began to negotiate commercial treaties with European powers in an endeavor to pave the way for a regular and organized foreign commerce. It was difficult at first to induce foreign nations to enter into comprehensive commercial treaties, yet a general commercial treaty was concluded with France as early as 1778 and 1800, with The Netherlands in 1782, with Prussia in 1785 and 1799, with Spain in 1795, with Sweden in 1783, and with Great Britain

[1]The full text of all treaties, conventions, and international agreements of the United States may be found in *Treaties, Conventions*, etc., *between the United States of America and Other Powers, 1776–1909*, compiled by Wm. M. Malloy (Sen. Doc. No. 357, 61 Cong., 2 sess., 2 vols., 1910), and *Ibid., 1910–1913*, of the same series, compiled by G. Charles (Sen. Doc. No. 1063, 62 Cong., 3 sess., 1 vol., 1913). These volumes contain most of the material used in writing this chapter. Use has also been made of Moore, *Digest of International Law* (House Doc. No. 551, 56 Cong., 2 sess., 7 vols., 1906). Reference may also be made to Fisk, *International Commercial Policie* (1910).

in 1794 and 1815. These early treaties were narrow in scope and subject to restrictions. After the war of 1812 the commercial treaties of the United States became more comprehensive, as well as more numerous.

The entire period from 1815 to the Civil War was replete with negotiations, and general commerce and navigation treaties were accepted not only by most of the countries of Europe, but also in South and Central America, Mexico, and Asia. Additional treaties of this general type have been made since the Civil War, especially with the more recently opened countries of the world, while others have expired or have been abrogated either by foreign powers or by the United States. The general commercial treaties which have so long governed the trade between the United States and many foreign nations are variously known as treaties of "peace and commerce," of "friendship, boundaries, commerce, and navigation," "friendship and general relations," "amity and commerce," "friendship, commerce, and extradition," "friendship, commerce, and navigation," and by other titles, but they are most commonly referred to as treaties or conventions of "commerce and navigation."

Though these treaties are by no means identical, they ordinarily contain common provisions concerning a limited number of commercial subjects, and usually include a clause providing for *reciprocal freedom of commerce and navigation*, a clause which was limited and restricted in some of the earlier treaties, but which later became more general. The first commercial treaty with Great Britain, for example, Jay's treaty of 1794, specifically excepted the British West Indies and Canada from this general clause, and the treaty of 1815 did likewise. A typical statement of the usual provision for reciprocal freedom of commerce and navigation is contained in the Prussian treaty of 1828:

> "There shall be between the territories of the high contracting parties a reciprocal liberty of commerce and navigation. The inhabitants of their respective States shall mutually have liberty to enter the ports, places, and rivers of the territories of each party, wherever foreign commerce is permitted. They shall be at liberty to sojourn and reside in all parts whatsoever of said territories, in order to attend to their affairs; and they shall enjoy, to that effect, the same security and protection as natives of the country wherein they reside, on condition of their submitting to the laws and ordinances there prevailing."

Supplementary to the general provision for freedom of commerce and navigation, a separate clause frequently stipulates certain mutual trade privileges. For example, Article 6 of the Brazilian treaty of 1828 provided as follows:

> "It is likewise agreed that it shall be wholly free for all merchants, commanders of ships and other citizens or subjects of both countries to manage themselves, their own business, in all the ports and places subject to the jurisdiction of each other, as well with respect to the consignment and sale

of their goods and merchandise by wholesale or retail, as with respect to the loading, unloading and sending off their ships, they being in all these cases to be treated as citizens or subjects of the country in which they reside, or at least to be placed on a footing with the subjects or citizens of the most favored nation."

MOST-FAVORED-NATION CLAUSE.

The commerce and navigation treaties are especially important because of the "most-favored-nation" clauses which they contain. Ordinarily the most-favored-nation clause in the commercial treaties of the United States is a general clause in which the contracting nations guarantee to treat each other in the same manner as they treat the most favored nation in all matters of commerce and navigation, providing the conditions are identical. As early as 1778, for instance, the French treaty of "amity and commerce" provided that "the most Christian King and the United States engage mutually not to grant any particular favour to other nations, in respect of commerce and navigation which shall not immediately become common to the other party, who shall enjoy the same favour, *freely, if the concession was freely made, or on allowing the same compensation, if the concession was conditional.*" The most-favored-nation clause stated in this way has become known as the American or restricted clause, as distinct from the unconditional clause contained in the treaties between European countries. The most-favored-nation clause of some American treaties does not specifically express its restricted nature, but it is now understood by all nations that, under the American interpretation, the granting of special trade concessions to one country does not entitle all other treaty powers to such concessions unless the concessions were freely made, or unless the other countries are willing to make the same compensation as the most favored nation. European nations have at times charged the Unt ed States with a violation of the most-favored-nation clause, but such charges have usually been due to a failure to understand the restricted nature of the American clause.

In addition to making the general clause applicable to all commercial matters, it is a common practice specifically to extend most-favored-nation treatment in the matter of the duties on imports and exports. The Prussian treaty of 1828, for instance, although it contains the usual most-favored-nation clause, also provides that—

"No higher or other duties shall be imposed on the importation into the United States of any article, the produce or manufacture of Prussia, and no higher or other duties shall be imposed on the importation into the Kingdom of Prussia of any article the produce or manufacture of the United States, than are or shall be payable on the like article being the produce or manufacture of any other foreign country. Nor shall any prohibition be imposed on the importation or exportation of any article the produce or manufacture of the United States, or of Prussia, to or from the ports of the United States, or to or from the ports of Prussia, which shall not be equally extended to all other nations."

: restricted interpretation has been applied by the United States such clauses. It is now understood that they do not prevent nited States from entering into special reciprocal treaties with a ed nation, and that other treaty powers are not entitled to r treatment, unless they make the same compensation, or unless ncessions were freely made by the United States.

st-favored-nation treatment is also, in many commerce and navi- a treaties, especially applied to the consular and diplomatic e. The Argentine treaty of 1853, for example, contains the ring typical clause:

> ie Diplomatic Agents and consuls of the Argentine Confederation shall in the territories of the United States, whatever privileges, exemptions, mmunities are, or shall be, granted to agents of the same rank, belonging most favored nation; and in like manner the Diplomatic Agents and ls of the United States, in the territories of the Argentine Confederation, njoy according to the strictest reciprocity, whatever privileges, exemp- ınd immunities are, or may be, granted in the Argentine Confederation Diplomatic Agents and Consuls of the most favored nation."

some cases the clause is applied only to the consular service, the natic service not being included in the treaties dealing with ierce and navigation.

st-favored-nation treatment has sometimes been expressly ex- d in other specified matters. The above-mentioned Prussian r of 1828, for example, included the most-favored-nation proviso : clause providing for reciprocal trade privileges. The Turkish r of 1830 provides that "merchant vessels of the United States, : manner as vessels of the most favored nation, shall have liberty ss the Canal of the Imperial Residence, and go and come in the . Sea, either laden or in ballast. . . ." A British convention of applies it to the tenure and disposition of property. In a number ieral commercial treaties the statement of the most-favored-nation : is so general that it applies not only to commerce and navigation, o such other matters as are included in the treaties.

TREATMENT OF SHIPPING.

ıst of the general commerce and navigation treaties negotiated 1815 provide for shipping reciprocity. A Congressional act of authorized the adoption of shipping reciprocity in the direct between the United States and foreign countries, and an act of further extended the principle of reciprocity to the indirect as s to the direct foreign trade. Clauses were consequently inserted e commercial treaties with numerous countries, providing first, tonnage taxes and other shipping dues paid by vessels of the n country which is party to the treaty may be no higher than paid by national vessels engaged in the foreign trade; and, d, that the import or export duties on cargoes should be the same, ner they were carried in foreign or national vessels.[1]

[1] See chap. xii.

The charge of discrimination, which arose when Congress fixed the tonnage taxes paid by vessels engaged in the trade with Caribbean countries at 3 cents, while those engaged in the trade with other countries paid 6 cents, resulted in the act of 1886, which authorized the President to suspend the payment of all or such part of the tonnage taxes imposed on the vessels of such countries as might reciprocally suspend all or part of the tonnage dues imposed on American vessels; but this endeavor to extend the principle of shipping reciprocity even further than it had been carried in the commerce and navigation treaties which were negotiated after the enactment of the laws of 1815 and 1828 had no practical effects, because foreign nations were either unwilling or unable to permit the entry of American vessels without the payment of the regular tonnage dues.

The commerce and navigation treaties of the United States in many instances contain a clause which excepts the coastwise trade from the various conditions imposed upon foreign commerce. This became necessary after the enactment of the statutes which confined the American coastwise trade to vessels built in the United States and flying the American flag. The scope of "coastwise trade" in international treaties, moreover, has been gradually extended from coastwise traffic not requiring a deep-sea voyage, to traffic between any ports on one or more coasts of a nation taken as a geographical and political unit, and finally also to the trade between any country and its non-contiguous colonies. It was the United States that broke down the distinction between over-sea and coastwise trade, when the trade between the United States and Porto Rico, the Philippines, and Hawaii was defined as coastwise.

Many of these general treaties also contain provisions relative to the reciprocal property rights of the citizens of the United States and those of the foreign country which is party to the treaty. Many, likewise, specify the reciprocal privileges of citizens in matters such as residence, travel, warehousing, and litigation. The treaties establish the mutual right of the contracting countries to have consuls at the various trading centers, and specify their powers. Some commercial treaties, likewise, provide for the exchange of diplomatic agents.

One of the most troublesome of international issues has been the question of the treatment of merchant vessels in time of war, and consequently many of the commerce and navigation treaties contain clauses defining contraband goods, and in some treaties the goods which are not contraband are also specifically enumerated. As regards all goods which are not contraband, the contention of the United States has been that free ships make free goods, and many treaties made during the period from 1782 to the Civil War contain clauses to that effect.

The above provisions are descriptive of the general commerce and navigation treaties commonly negotiated by the United States, but special provisions were in some cases inserted. The Dutch treaty of

or example, prohibited the seizure or detention of "merchants, s and owners of ships, mariners, men of all kinds, ships and , and all merchandizes and goods in general . . . for any military tion, publick or private use of any one, by arrests, violence, or any thereof. . . ." Jay's treaty of 1794 with Great Britain con- provisions relative to the navigation of rivers and lakes. The n treaties of 1845 and 1858 exempted steamers in the regular between the United States and Belgium from tonnage duties chorage, buoy, or lighthouse dues. The Danish treaties of 1826 57 contain special clauses regarding the dues on vessels or cargoes ; the Sound or the Belts, the former applying the most-favored- clause and the latter abolishing such dues. In some of the . treaties the tariff duties on certain articles or the regulations ble to them are separately stated—for instance, in the clause Belgian treaty of 1845 concerning the importations of fish and id in the clauses in the treaty of 1846 with Hanover and in the of 1847 with Mechlenburg-Schwerin concerning the duties on leaf tobacco, whale oil, and rice.

SPECIAL COMMERCIAL TREATIES AND AGREEMENTS

ough the custom of negotiating general commerce and naviga- eaties still survives, there has been a tendency during the last the nineteenth century to discontinue the practice of negotiating reaties, and in some instances to displace them with special s covering such specific commercial matters as may from time e arise. Treaties and agreements concerning special trade and ig subjects were made early in the history of American diplo- and their number has in recent years been largely increased.
ecial consular convention with France was negotiated as early as supplement the general treaty of "amity and commerce" which en made in 1778. Though it was abrogated by Congress in the ng year, it was the forerunner of the numerous similar consular tions which were signed during the years from 1850 to 1902. pply the principle of most-favored-nation treatment to the con- rvice; they define the powers of consuls in contingencies involv- h matters as desertions from ships, shipping disputes, damages els, shipments and salvage, the performance of notarial acts, and the estates of deceased persons; they also establish the inviola- f consular offices and the exemption of consuls from military direct taxes, and preliminary arrest for offenses other than

y treaties, agreements, and conventions have been made with e to the navigation of rivers, bays, and lakes. The "treaty of which was negotiated with Great Britain in 1783 provided that avigation of the river Mississippi, from its source to the ocean,

shall for ever remain free and open to the subjects of Great Britain and the citizens of the United States." In 1795 Spain agreed that "the navigation of the said river, in its whole breadth from its source to the ocean, shall be free only to his [the King of Spain's] subjects and the citizens of the United States, unless he should extend this privilege to the subjects of other powers by special convention." The importance of these treaties to the inhabitants of the West has been fully discussed elsewhere.[1] When the Louisiana territory was finally purchased from France, the United States, in the cession treaty of 1803, agreed to maintain complete shipping reciprocity for a period of twelve years in the direct trade of New Orleans or other ports of entry in the ceded territory when conducted in the vessels of France or Spain, and to deny similar privilege to other foreign nations.

The United States has entered into many other special treaties with Great Britain concerning river and lake navigation. In 1818 it was agreed that the harbors, bays, creeks, and rivers of any country which may be claimed by either nation on the north Pacific coast west of the Stony Mountains should be free and open to British and American vessels for ten years, and in 1827 this convention was indefinitely extended. A convention of 1842, likewise, declared the various channels of the St. Lawrence on both sides of Long Sault Island and of Barnhart Island and those of the Detroit and St. Clair Rivers to be free and open to the vessels of both countries. The boundary treaty of 1846 declared the channels and straits opposite Vancouver's Island to be free and open to both countries, and the Columbia River to be free and open to the Hudson Bay Company and all British subjects trading with that company. The Canadian reciprocity treaty of 1854 opened the St. Lawrence River to American ships and Lake Michigan to British ships on mutually equal terms. The treaty of Washington of 1871, likewise, declared the St. Lawrence River and Lake Michigan to be free and open to navigation, and similarly opened the Yukon, Porcupine, and Stikine Rivers. Similar special conventions concerning rivers, lakes, and bays have been negotiated with other countries, notably with Argentina, Paraguay, Mexico, China, and the Kongo Free State.

The use of canals and railroads has been the subject of numerous special treaties and conventions, particular importance attaching to the treaties which govern the construction and operation of canals between the Atlantic and Pacific oceans. In the well-known Clayton-Bulwer Treaty of 1850 the United States and Great Britain guaranteed the neutrality and the use on equal terms by the citizens of Great Britain, the United States, and every other country, of any such inter-oceanic canal, no matter over what route or by whom it might be constructed. The treaty particularly concerned the proposed Nicaragua ship-canal, but it also specifically referred to "any other prac-

---

[1] Chapter xiii.

able communications, whether by canal or railway, across the ımus which connects North and South America, and especially to interoceanic communications, should the same prove to be prac-able, whether by canal or railway, which are now proposed to be ablished by the way of Tehuantepec or Panama." When the ited States Government finally decided to construct a canal across Isthmus of Panama, this treaty was superseded by the equally l-known Hay-Pauncefote Treaty of 1901, in which Great Britain hdraws from the joint contract which the former treaty established l which omits any reference to the fortification of the canal by the ited States, while the United States singly guarantees its neutrality l promises that "the canal shall be free and open to the vessels of nmerce and of war of all nations observing these rules, on terms of ire equality, so that there shall be no discrimination against any h nation, or its citizens or subjects, in respect of the conditions or rges of traffic, or otherwise." The Hay-Pauncefote Treaty likewise ained the "general principle" of neutralization established in Article II of the Clayton-Bulwer Treaty—the article that guaranteed that canal charges would be the same for the citizens of the United tes, Great Britain, and all other countries. When in August 1912 ngress exempted American ships engaged in the coastwise trade from payment of tolls, there was a world-wide charge, specifically voiced Great Britain, that the United States had violated its treaty obliga-ıs. The widespread discussion of the treaty throughout the United tes, where public opinion was divided, and in foreign countries, ere it was uniformly opposed to the action taken by Congress, tinued until June 15, 1914, when Congress repealed that clause he Panama Canal act of August 24, 1912, which exempted American ps engaged in the coastwise trade from the payment of tolls. The eal was not based entirely upon the question of treaty rights, but tly upon the equally important question of domestic policy.[1]

There are various other treaties concerning interoceanic transpor-ion. In a treaty negotiated with New Granada (Colombia) in 1846 government of New Granada guaranteed that any means of transit ommunication which then existed or might in the future exist across Isthmus of Panama should be free and open to the citizens of the ted States and that the citizens of the United States should not be ged to pay any higher charges than those paid by the citizens of v Granada; and the United States guaranteed the "perfect neu-ity" of the Isthmus of Panama and the rights of sovereignty and perty possessed in the isthmus by New Granada In 1853, Mexico eed that the railroad which was to be constructed across the Isthmus Tehuantepec should be open to both nations and that "at no time ll higher charges be made on the transit of persons and property of

[1]Johnson, *Panama Canal Traffic and Tolls* (1912), chap. xii.

citizens of the United States than may be made on the persons and property of other foreign nations, nor shall any interest in said transit way, nor in the proceeds thereof, be transferred to any foreign government."

In a treaty made in 1864, Honduras guaranteed that any interoceanic railway constructed across Honduras should be open to the United States and that the transit charges paid by citizens of the United States should be no higher than those paid by citizens of the most-favored nation; and the United States guaranteed "the entire neutrality" of such railroad and recognizes the "sovereignty and property rights" of Honduras.

Nicaragua, similarly, in a treaty negotiated in 1867 and denounced by that republic in 1902, guaranteed to the United States the right of transit over any interoceanic canal or water route constructed across Nicaragua, and promised that "no higher or other charges or tolls shall be imposed on the conveyance or transit of persons and property of citizens or subjects of the United States, or of any other country, across the said routes of communication, than are or may be imposed on the persons and property of citizens of Nicaragua."

The United States agreed to protect such interoceanic routes and to "guarantee the neutrality and innocent use of the same." In the Panama convention of 1903, the newly formed Republic of Panama granted to the United States a zone of land 10 miles wide for canal purposes, the compensation being $10,000,000, an annuity of $250,000 beginning nine years after the ratification of the treaty, the free passage of Panama government vessels, troops, and munitions of war, and certain other assured benefits. The United States guaranteed the independence of Panama, the perpetual neutrality of the canal, and its operation in accordance with the provisions of the Hay-Pauncefote Treaty.

The Canadian reciprocity treaty of 1854 and the treaty of Washington of 1871 assured the use of the Great Lakes canals on terms of equality as between Great Britain and the United States. The former treaty, which expired in 1866, opened the Canadian canals to the vessels and citizens of the United States "subject only to the same tolls and other assessments as are now or may hereafter be exacted of Her Majesty's said subjects. . . ." In the latter "the Government of her Britannic Majesty engages to urge upon the Government of the Dominion of Canada to secure to the citizens of the United States the use of the Welland, St. Lawrence, and other canals in the Dominion on terms of equality with the inhabitants of the Dominion; and the Government of the United States engages that the subjects of her Britannic Majesty shall enjoy the use of the St. Clair Flats Canal on terms of equality with the inhabitants of the United States, and further engages to urge upon the State Governments to secure to the subjects of her Britannic Majesty the use of the several State canals connected

with the navigation of the lakes or rivers traversed by or contiguous to the boundary line between the possessions of the high contracting parties, on terms of equality with the inhabitants of the United States." When, some years later, Canada undertook to collect a nominal toll of 20 cents a ton upon the merchandise both of the United States and Canada, but to rebate 18 cents for all merchandise which went to Montreal or beyond, the United States Government in 1888 charged a violation of this treaty, and the Canadian Government later withdrew the objectionable discrimination.

Another group of special treaties includes those which regulate or abolish shipping dues collected on certain rivers, sounds, or other navigable waters. In 1863, for example, a special "convention for the extinguishment of the Scheldt dues" was entered into with Belgium. In 1857, Denmark agreed to a "convention discontinuing Sound dues," and in 1861 Hanover agreed to abolish all tolls up to that time levied on American vessels or their cargoes when navigating the river Elbe.

Treaties between the United States and Great Britain concerning the repression of the slave trade were negotiated in 1814, 1842, 1862, 1863, and 1870, and a general international treaty abolishing the African slave trade, to which the United States is a party, was negotiated in 1890. Many of the extradition treaties which were negotiated with various foreign countries, moreover, provide for extradition in case of slave-trading crimes, and several British treaties made in 1818, 1822, and 1826 provided for the restoration of slaves and payment for certain American slaves carried away in British vessels during the War of 1812.

Important among the more recent special acts are the twenty agreements, proclamations, and conventions providing for the mutual protection of copyrights, which were made during the years 1891 to 1912. Ever since 1858, likewise, a large number of agreements and conventions guaranteeing the reciprocal protection of trademarks have been negotiated. In the case of China, the United States not only obtained a trademark agreement from that country in 1903, but during the years 1904 to 1908 also obtained agreements from Denmark, France, Great Britain, Italy, Japan, Holland, and Russia. During the years 1894 to 1911 various agreements were negotiated concerning the protection of patent rights. Many of the special agreements concerning patents and trademarks are supplementary to the general international convention for the protection of industrial property, which was mutually adopted by the United States and many other nations in 1883 and amended in 1891 and 1900. An international copyright convention was also concluded in 1902.

The special trade reciprocity treaties which were negotiated with Canada in 1854, with the Hawaiian Islands in 1875 and 1884, and with Cuba in 1902 and 1903 are fully discussed in Chapter XLI. A similar reciprocity convention was negotiated with Mexico in 1883, but it never became effective, because Congress failed to enact the necessary legis-

lation. The short-lived reciprocity agreements which were negotiated in 1891 and 1892 with Austria-Hungary, Germany, Cuba and Porto Rico, Guatemala, Honduras, Nicaragua, Salvador, Santo Domingo, Brazil, and with Great Britain for the Barbados, Jamaica, the Leeward Islands, Trinidad and Tobago, the Windward Islands (except Granada) and British Guiana, in accordance with section 3 of the McKinley tariff act, are likewise described in Chapter XLI; and so too are the reciprocity agreements negotiated under the third section of the Dingley tariff act, during the years 1898 to 1909, with France, Germany, Portugal, Switzerland, Italy, Great Britain, Holland, and Spain. The agreements made in 1891 and 1892 were terminated in 1894 by the enactment of the Wilson tariff law, and the agreements made under the Dingley act were ended in 1909 by the passage of the Payne-Aldrich tariff act.

Other groups of special commercial treaties are those concerning the fisheries and fur-seal industry, which are discussed in Chapter XXXIII, those which have, since the forties, been made with reference to the protection of property rights, and a limited number of treaties stipulating the special foreign regulations or tariffs applicable to certain commodities. Somewhat different from other conventions are the 47 parcels-post conventions which have in recent years been negotiated by the Postmaster-General and ratified by the President of the United States. There are also a few special treaties and conventions dealing with subjects such as the rights of neutrals at sea, the reciprocal measurement of vessels, the position of corporations and trade associations, and the recovery of deserters from merchant vessels.[1]

COMMERCIAL TREATIES WITH CHINA.

Though the general commerce and navigation treaties and numerous special commercial treaties have regulated to some extent the foreign trade of the United States with many countries, the trade with those countries has not depended entirely or even principally upon treaty rights. There have been times when a heavy foreign trade was carried on with some of the well-developed countries of Europe, and even with the less settled countries of North and South America, without the aid of commercial treaties. Trade between the United States and most of the commercial nations of the world has for many years been so well founded that it has not been absolutely dependent upon treaties, even though all treaties which safeguard and define the commercial and shipping rights and privileges of the United States have been an important trade asset. The trade with some countries, however, especially with those which are or have been wholly undeveloped, which at one time were wholly or largely closed to American traders, and whose inhabitants and trade customs differ widely from those existing in other parts

[1]Treaty provisions calling for the arrest and imprisonment of deserting seamen terminated by the seamen's act of March 4, 1915.

of the world, has been much more closely dependent upon the commercial treaties which the United States has succeeded in negotiating.

Such a country is China, where for many years the trade of the United States and European countries has depended upon commercial diplomacy commercial treaties, and in some instances physical force. While the policy of the United States towards China has differed from the policy of European countries in some respects, yet American diplomatic agents have frequently cooperated with those of European powers in the negotiations of treaties and in the protection of the lives and property of foreigners. The chief point of difference has been that the United States has not followed Europe in the acquisition or lease of Chinese territory. The American policy has been that of the "open door," because the purpose of the United States has consistently been the development of international trade. Neither has the United States imitated European powers in the use of physical force, except for the protection of lives and property. It is true, however, that the use of arms by European powers has, in some instances, benefited the United States, inasmuch as the most-favored-nation clause has automatically assured to the United States any trade privileges obtained by force. Moreover, by refusing to join in the aggressive policy of Europe, the United States has at times earned the good will of the Chinese Government.

Although a direct trade between the United States and China had been carried on since 1784, and an indirect trade by way of Europe since a much earlier date, it was only at Canton that China regularly permitted a foreign trade with western nations prior to 1842. On August 29 of that year Great Britain, after the use of arms in the so-called "opium war," entered into a treaty of peace with China, by the terms of which China ceded Hongkong to Great Britain and opened to British subjects and their commerce five treaty ports. In the following year the United States began negotiations for a commercial treaty, and after encountering many difficulties succeeded, in 1844, in obtaining a "treaty of peace, amity, and commerce."

This treaty opened five treaty ports to American commerce—Kwangchow, Amoy, Fuchow, Ningpo, and Shanghai—American citizens and their families being permitted to reside and trade there, and their vessels and cargoes to enter and clear at will. Fees and charges at these ports were formally abolished, the import and export duties were prescribed in a tariff which was made part of the treaty, and it was agreed that American citizens should "in no case be subject to other or higher duties than are or shall be required of the people of any other nation whatever." Chinese tonnage duties were also prescribed in the treaty. American consuls with unusually extensive powers were admitted, it being agreed that "citizens of the United States who may commit any crime shall be subject to be tried and punished only by the Consul or other public functionary of the United States, thereto autho-

rized, according to the laws of the United States." As was also done in the case of other foreign countries trading at the Chinese treaty ports, American citizens were authorized to obtain houses, or places of business, or to lease sites for their construction, the local authorities of China and the United States selecting their location. American traders were enabled to conduct their own trade at the treaty ports, the former requirement that foreign trade must be conducted through certain Chinese hong-merchants at Canton being definitely abolished.

Though this treaty greatly benefited the trade of the United States, the turbulent condition prevailing in China between 1850 and 1860 and the injuries inflicted on foreign merchants by Chinese pirates, caused the United States and several European countries to desire an extension and revision of their treaty rights. Various special American commissioners were sent to China during the years 1853 and 1858 to negotiate a new commercial treaty. The United States Government cooperated with the governments of Great Britain, France, and Russia, which were likewise endeavoring to obtain revised treaties. A joint request was made by the several powers in February 1858, and Great Britain and France moved upon Canton with armed forces. Pursuing a friendly and peaceful although a determined policy, the United States succeeded in obtaining a revised commercial treaty on June 18, 1858, and a supplementary claims convention on November 8 of the same year. Under the claims convention it was agreed that 500,000 taels, or about $700,000, would be paid out of the receipts from tonnage, import, and export duties on American vessels at Canton, Shanghai, and Fuchow, in full satisfaction of the claims of American citizens.

The additional concessions gained under the "treaty of peace, amity, and commerce" of 1858 were the establishment of diplomatic intercourse with the Chinese Government, with the promise of permanent official residence of diplomatic agents at Pekin whenever such privilege should be granted to any other foreign power; the immediate increase of the number of treaty ports from five to eight, and the permission to trade at any other port or place thereafter opened to other foreign countries; a promise to suppress and punish piracy, robbery, and rioting; the right to locate American houses and places of business without interference by local authorities; a revision of tonnage duties; and a promise of religious liberty. An important provision was the guarantee of most-favored-nation treatment in all matters of commerce, navigation, and political or other intercourse. The import and export duties of China were the same as they had been in 1844, except in so far as some of them had been changed by treaty with other nations. Since numerous tariff changes of this kind had been made, a supplementary treaty was concluded, in November 1858, in which the duties and regulations applicable to the trade of the United States were definitely stated.

new departure in Chinese diplomacy occurred in the summer of when a legation from China arrived at Washington to negotiate nmercial treaty. Former treaties had been obtained only upon est of the United States and other foreign powers. The under- principle of the "treaty of trade, consuls, and emigration," which concluded in July of 1868, was the recognition of the sovereignty e Imperial Government at Pekin over the people of China and their commercial, social, and political relations with western ns. The United States acknowledged the sovereignty of China tracts of land which had been set aside for purposes of foreign , and agreed that any trade or shipping right not stipulated by y should be subject to the discretion of the Chinese Government, that the United States would not interfere in matters of internal ovement. Chinese consuls were admitted to the United States ie same terms as those of Great Britain and Russia. China on ide made certain concessions regarding travel and residence, vol- y emigration, and religious freedom.

other commercial treaty was negotiated in 1880, the year in which irst Chinese immigration treaty was signed. It prohibited the rtation of opium, established shipping reciprocity as regards duties oth tonnage and cargoes, and provided that controversies between rican and Chinese citizens should be tried by the "proper official e nationality of the defendant," the authorized officials of the tiff's nationality, however, having the right to attend and examine cross-examine witnesses.

additional treaty, other than the immigration treaty of 1894, negotiated until 1901, but the United States benefited to some it by the application of the most-favored-nation clause, five new y ports, for example, being opened as a result of the treaty of between Japan and China. In 1899, moreover, the Secretary of , John Hay, addressed diplomatic notes to Great Britain, Ger- y, Italy, France, Russia, and Japan regarding the future applica- of the "open door" policy in their leased territories or "spheres of est" in China, and obtained favorable assurances that the policy d be maintained.

the meantime the foreign trade of China was frequently disturbed iots, the most serious disturbances being the so-called Boxer les of the year 1900. The armed forces of the various European tries and of the United States were used to protect the lives and erty of foreigners, and at the conclusion of the troubles a joint col was signed by China, Germany, Austria-Hungary, Great in, Belgium, Spain, France, Italy, Holland, Russia, Japan, and United States. Aside from matters of indemnity, punishment of ders, and the like, China agreed to negotiate certain amendments e commercial treaties of the allied nations, and to cooperate in the ovement of the Peiho and Whang-Pu Rivers. The provision with

reference to the latter river was amended by a new international agreement signed in 1905. China also agreed to raise the duties on foreign imports to a minimum of 5 per cent ad valorem, certain articles, however, remaining on the free list.

In accordance with Article XI of the international protocol of 1901, an amended commercial treaty was concluded between the United States and China in 1903. It provided that the diplomatic officers of the United States may permanently reside at the capital of China, that American consuls shall have all the rights of any other foreign consuls, that American citizens may "frequent, reside, and carry on trade, industries and manufactures or pursue any lawful avocation" in all the ports or localities opened to foreign residence and trade, that American citizens may establish bonded warehouses subject to necessary regulations, that they may engage in mining operations subject to the revised mining regulations of China, and that American trademarks, copyrights, and patents shall be protected. China further specifically agreed that having, in 1898, opened the navigable streams to commerce by all steam-vessels registered for the purpose, "citizens, firms, and corporations of the United States may engage in such commerce on equal terms with those granted to the subjects of any foreign power." The Chinese duties on American imports were set forth in an annexed tariff in accordance with the 5 per cent minimum stipulated in the international protocol of 1901; the duties on American exports were limited to a maximum of 5 per cent ad valorem; and in lieu of the former special system of taxation of foreign goods in transit, known as "likin," and various other taxes on foreign goods, it was agreed that one special surtax should be collected at the time of importation. The United States consented to the prohibition of the importation of morphia and instruments for its injection, except for medical purposes, and agreed to relinquish extra-territorial rights "when satisfied that the state of the Chinese laws, the arrangements for their administration, and other considerations warrant it in so doing."

This treaty, which has since 1903 governed the trade between the United States and China, superseded the preceding treaties only in so far as they contained conflicting provisions. It was expressly stated that "all the provisions of the several treaties between the United States and China which were in force on the first day of January, A. D. 1900, are continued in full force and effect except in so far as they are modified by the present Treaty or other treaties to which the United States is a party."

COMMERCIAL TREATIES WITH JAPAN.

Another country in which the trade of the United States has been largely dependent upon rights established by treaty is Japan. Until the United States obtained a treaty in 1854, the foreign trade of Japan was insignificant and was practically confined to China, Korea, Holland, and Portugal. At times only the Chinese and Dutch were allowed to

trade in Japan, the trade of Holland in 1845 being limited to one port.[1] The United States made various attempts to negotiate a commercial treaty with Japan during the years 1832 to 1852, but without success, and without such treaty regular trade with Japan was impossible.

The subject concerning which Japan was finally forced to make a treaty was that of obtaining redress for the mistreatment of American sailors who had been shipwrecked on the coast of Japan. In 1852, Commodore M. C. Perry was intrusted with the mission of securing a treaty, and after much negotiation, enforced by the display of all the naval power at his command, a "treaty of peace, amity, and commerce" was concluded in March 1854. It was but the merest beginning of more extensive trade privileges which were obtained later. Two ports were opened to American vessels as places where wood, water, provisions, coal, and supplies might be obtained. The protection of shipwrecked sailors, passengers, and cargoes was promised. Trading according to regulations established by Japan was to be permitted at the two treaty ports; American consuls were to be received at one of these ports, and the United States was promised most-favored-nation treatment.

The treaty negotiated by Commodore Perry was soon after followed by two more extensive treaties. In 1857 a "commercial and consular treaty" was concluded. American vessels were admitted at three ports, instead of at but two, American citizens were permitted to reside permanently at two ports, an American vice-consul was admitted at one additional port, and it was agreed that "Americans committing offenses in Japan shall be tried by the American Consul General or Consul, and shall be punished according to American laws."

This treaty was in the following year superseded by a "treaty of commerce and navigation," which permitted an American diplomatic agent to reside at Yedo, and American consuls to reside at all the Japanese ports open to American commerce, reciprocal privileges being granted to Japan. A number of additional Japanese treaty ports were specified where American citizens were permitted to lease ground, purchase buildings, erect dwellings and warehouses, and conduct trade. The import and export duties to be paid at these ports were fixed in a tariff schedule appended to the treaty, the opium trade was prohibited, and various trade regulations were agreed upon. It was also agreed that American citizens in Japan should be allowed the free exercise of their religion.

Similar treaties were made by Japan with Great Britain, France, Holland, Prussia, and Russia, which were followed by severe anti-foreign disturbances, the American legation being burned. Moreover, the partisans of the Mikado refused to recognize the treaties which had been made by the Tokugawa Shōgun's Government. When the Prince Daimyō of Chosu, who controlled the Straits of Shimonoseki, closed the

---

[1] ...re, *International Law Digest*, V, 734.

and navigation," which was signed in February of that year, contains most of the provisions of the former treaty, but differs from it in that it provides that future import tariffs shall be "regulated either by treaty between the two countries or by the internal legislation of each." Pending the negotiation of a special tariff treaty, it was later agreed in a special protocol that the tariff provisions of the treaty of 1894 should remain in force. The treaty of 1911 guaranteed the inviolability of dwellings and places of business, abolished all transit duties, promised equality of treatment with native citizens or subjects in matters of warehouses, bounties, facilities, and drawbacks, authorized corporations and other associations to exercise their rights in the courts, and explicitly guaranteed complete freedom of foreign trade and navigation.

There are other commercial treaties, notably those with Korea, Siam, Borneo, the Barbary States, the Kongo Free State, Egypt, Zanzibar, Madagascar, and Ethiopia, which contain provisions differing widely from those contained in the usual commerce and navigation treaties of the United States. Some of the treaties contain special provisions with reference to the import and export duties and tonnage dues which may be collected on American ships and cargoes, and some specify particularly the places at which trade may be conducted and the manner in which it is to be carried on, while others deal with the use of rivers, railroads, and other means of transportation, the protection of persons and property, and the powers of American consuls. Since the trade conducted under these treaties has always been relatively small in volume, they need not be fully described.[1]

INTERNATIONAL CONVENTIONS, AGREEMENTS, UNIONS, AND OTHER ACTS.

The United States, jointly with other treaty powers, has become party to numerous international conventions and acts dealing with particular matters of commerce. Some of them have been mentioned in other connections, as, for example, the general act for repression of the slave trade (1890), the international protocol made at the conclusion of the Boxer trouble (1901), the new agreement as to the Whang-Pu River Conservancy (1905), and the international convention for the protection of literary and artistic copyrights (1902).

The United States is also a member of the Universal Postal Union, which was established in 1874 by a treaty called the Universal Postal Convention. In the following year the United States joined with 16 other powers in the establishment of an "international bureau of weights and measures." It was also stated, in connection with trademarks and patents, that the United States is party to the "convention for the international protection of industrial property," which was concluded in 1883 and supplemented in 1891 and 1900. This conven-

[1]See *Treaties, Conventions, International Acts, etc.*, I, II, and III.

tion deals not only with trademarks and patents, but with the protection of commercial names, articles at expositions, and alien residents, with seizure of unlawfully marked goods, and with the maintenance of an international bureau. The United States is, likewise, party to the international "convention for protection of submarine cables," concluded in 1884, and supplemented in 1886 and 1887; to the convention concerning the formation of an international union for the publication of customs tariffs, concluded in 1890; and to the international conventions regarding the importation of spirituous liquors in Africa, concluded in 1899 and 1906. In 1903 and 1905, international sanitary conventions of which the United States is a party were concluded; and in 1907 an agreement was made providing for the establishment of an international office of public health. The United States became a party to the international agreement respecting the unification of formulas for potent drugs, concluded in 1906; to the international wireless-telegraph conventions concluded in 1906 and 1912; and to the international convention of 1911 for the unification of rules with respect to assistance and salvage at sea. In 1910 the United States also ratified the international convention of 1907 respecting the rights and duties of neutral powers in naval wars, but, being contingent upon ratification by other powers, the convention did not become effective.[1]

The United States is party to various other international conventions not directly concerning commerce and shipping. Those here mentioned are important in that they tend toward the uniform treatment by many powers of the special commercial matters with which they deal. Were it not for these international agreements, more special conventions between the various industrial nations would be necessary.

[1]The convention was ratified in 1909 by Germany, Austria-Hungary, Denmark, Mexico, The Netherlands, Russia, Sweden, Salvador, and the United States.

PART TWO

AMERICAN FISHERIES

By T. W. VAN METRE

CHAPTER XXXI.

THE FISHERIES OF NEW ENGLAND, 1789–1860.[1]

Prosperous condition of fisheries, 1789–1860, 157. The whale fishery, 158. Whaling expeditions to the Pacific Ocean, 159. Whale products in the foreign trade, 159. The whaling industry at Sag Harbor, Nantucket, and New Bedford, 160. Decline of the whaling industry, 161. The cod fishery, 161. Bounties in aid of the cod fishery, 162. Provisions of act of 1819, 163. Increase in tonnage of cod-fishing fleet, 163. Fishing rights opposed by the British Government in 1815, 164. The beginning of the "fishery question" in 1818, 165. Exports of cod, 1830 to 1860, 165. The mackerel fishery, 166. Herring, halibut, menhaden, oyster, and lobster fisheries, 167.

Except for temporary difficulties resulting from the tariff policy of the new government and the disturbed state of foreign affairs which eventually culminated in the second war with Great Britain, the New England fisheries, quickened by the stimulation felt generally in all lines of economic activity in the United States, had from 1789 to 1860 a period of great prosperity and expansion. Throughout the colonial period and during nearly all of the first quarter of the nineteenth century the prosperity of the fisheries depended mainly upon favorable conditions of foreign commerce. During the period of the Napoleonic wars the foreign trade of the United States was in a continual state of uncertainty, rising and falling in volume according to the rapid changes in the commercial policies of the French and the English Governments. This lack of stability of maritime commerce rendered impossible the successful operation of the fisheries. With the downfall of the Continental system, the overthrow of Napoleon, and the conclusion of the second peace with Great Britain, the foreign trade of the United States was restored to a normal state, and the long period of peace which ensued gave opportunity for undisturbed development. Moreover, certain internal changes in the United States were of even greater benefit to the fisheries than the restoration of peaceful relations with European nations. The growth of industrial and commercial activity along the Atlantic seaboard, the opening of the Middle West, and the economic progress of the South were attended by a great increase of population, which brought about a constantly growing domestic demand for all the products of the various fishing industries. A home market which took the large portion of the product, and a foreign market that always absorbed the annual surplus, easily made possible the successful pursuit of all branches of the fisheries. The cod fishery, which besides its natural advantages received subsidies from the Federal Government, grew vigorously, its area widening and its tonnage

[1] In addition to the references indicated, the writer of these chapters on the fisheries has consulted an unpublished work by Professor Walter S. Tower on the *History of the Fisheries of the United States Outside of New England*, written during 1906 and 1907.

increasing; the whale fishery recovered from its prostration and reached the climax of its development; the mackerel fishery, which was of only minor importance during the eighteenth century, became a notable industry; and other fisheries, such as the oyster, herring, and menhaden, assumed a position of commercial importance. For the sake of greater clearness, these various branches of the New England fisheries will be separately considered.

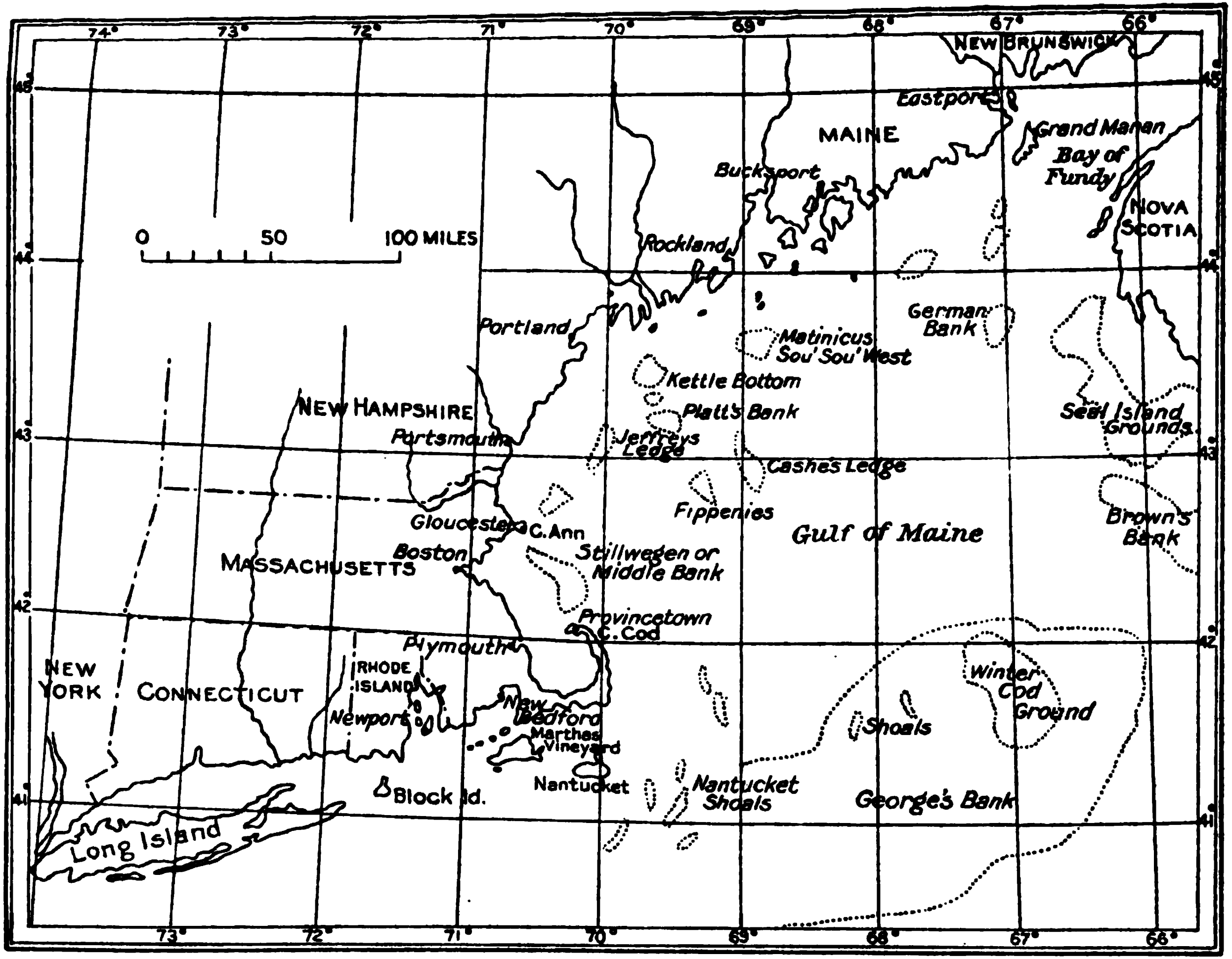
THE WHALE FISHERY.

Until after the close of the second war with Great Britain, the New England whale fishery had a precarious existence, sometimes prospering, when a relaxation of commercial restrictions extended the range of markets and caused prices to rise, only to meet with disaster again, when the market was suddenly limited and an excess of products brought about low prices. Capital was not lacking and whalemen were not wanting, but the continual state of uncertainty of political conditions permitted small chance of success in a business in which so long a time elapsed between the inception of the enterprise and the sale of the product. The opening of the French market in 1789 caused a temporary revival of whaling, but the French Revolution and the war between France and England abruptly terminated the short period of prosperity, the shipments to France after 1792 not even paying costs.[1] Trouble between France and the United States in 1798, together with commercial legislation during Jefferson's administration, caused fresh disasters, and though there was a partial revival by 1812, the war with England broke out and put a complete stop to the industry. Many of the whale ships at sea when the war was declared were taken as prizes by the English naval vessels, and those which were fortunate enough to reach home were either converted into privateers or lay idle until hostilities were over.

With the return of peace with England and the termination of the long series of European wars, the whaling industry revived and entered upon a long period of unexampled prosperity. By 1818, the gross tonnage of vessels employed in the whale fishery of the United States was 16,750 tons, the highest point reached up to that time since the beginning of the Federal Government.[2] The next forty years witnessed an almost continual increase in the size of the fleet, and, though given no financial aid by the Federal Government, such as the cod fishery received, whaling soon took the lead among the fishing industries of the United States, the annual value of its products during the later years of this period amounting to considerably more than the value of the products of all the other fisheries combined. The demand for whale products at home and abroad grew so rapidly that, notwithstanding the rapid increase of production, prices tended to rise. The prices of

---

[1] Macy, *History of Nantucket*, 150. [2] *Report of U. S. Commissioner of Navigation, 1910*, p. 210.



MAP 7. FISHING GROUNDS OF THE GULF OF MAINE.

(From McFarland's *History of the New England Fisheries.*)

sperm oil and whale oil were considerably higher in 1860 than in 1820, and the price of whalebone, which met with a constantly growing demand, advanced from 10 cents to about 90 cents a pound during the forty years.[1] Year after year the whaling fleet grew in tonnage; larger ships were used; better methods were employed; all parts of the sea were visited by the intrepid whalers; and millions of gallons of oil and millions of pounds of whalebone were brought home to the New England ports to be sold in domestic and foreign markets.

The documented tonnage of the whaling fleet of the United States, which had sunk to nothing in 1814, was 35,391 tons, gross tonnage, in 1820. Eleven years later it was 82,316 tons, and by 1841 it was 157,405 tons. From 1845 to 1860 it fell below 180,000 tons in only one year; several years it was more than 190,000 tons, reaching a maximum of 198,594 tons in 1858, and in 1860, when the period of decline was setting in, it measured 166,841 tons. From 1835 to 1860 the fleet averaged more than 600 vessels a year. The annual product averaged 118,000 barrels of sperm oil, 216,000 barrels of whale oil, and 2,324,000 pounds of whalebone, representing an average annual value of about $8,000,000.[2] In the census of 1860, the value of the products of the whale fishery during 1859–60 was given as $7,749,305.[3]

Until 1791 the operations of the deep-sea whaling vessels of the United States were confined to the Atlantic Ocean. In that year a half dozen Nantucket whalers sailed around Cape Horn into the Pacific Ocean in search of sperm whales.[4] The voyages proved successful, and during the next few years several more vessels went to the new hunting-grounds. When whaling was resumed, after the war of 1812, the Pacific grounds were again sought out. For a time the Pacific whalers cruised only along the coast of Chile; but as whales became scarce in that region, voyages were made farther and farther into the Pacific, to both the southern and the northern parts of the ocean. By 1821 whaling-vessels reached the Japanese coast; not many years later the whaling-grounds along the northwest coast of North America were discovered; then the grounds along the Kamchatka and in the Okhotsk Sea were visited; and in 1848 a vessel from Sag Harbor made a successful trip into the Arctic Ocean. By 1835 most of the deep-sea whaling was carried on in the Pacific Ocean. Often the New England whaler would come home by the eastern route, sometimes cruising for a while in the Indian Ocean about the island of Madagascar or at the entrance of the Red Sea, to secure a possible addition to his cargo.

Throughout the long period of prosperity in the whaling industry, whale products constituted an important item in the foreign trade of the United States. Though the larger part of the oil was taken by the

---

[1] Tower, *History of the American Whale Fishery*, 128.
[2] Goode, *Fisheries and Fishery Industries of United States*, sec. v, II, p. 170.
[3] U. S. Census 1860, *Miscellaneous Statistics*, 550.
[4] Tower, *History of the American Whale Fishery*, 43.

domestic market, millions of gallons of oil, as well as millions of pounds of spermaceti candles, were exported, and nearly all the whalebone was sold in foreign markets. New York and Boston were the important centers of the export trade. Until about 1840 the chief foreign markets for sperm oil were in the West Indies and South America, most of the whalebone exported went to France and the Hanse towns, and the exports of whale oil were sold chiefly to the Hanse towns, Holland, and Belgium. Afterwards England became the chief market for spermaceti, and also bought large quantities of whalebone, while the whale oil continued to be exported to the ports of northern Europe, to the West Indies, and to South America. For the two decades following 1840 the average annual exports of sperm oil exceeded 710,000 gallons, while those of whale and other fish exceeded 1,193,000 gallons; the quantity of whalebone exported was about 1,604,000 pounds.[1]

With the exception of an occasional vessel from Philadelphia, Newark, or Wilmington, the whaling fleet of this period was made up of vessels from the ports of New England and New York, Massachusetts contributing by far the largest number. Of New York ports, Sag Harbor sent out the largest number of vessels, its largest fleet numbering 63 vessels, in 1846. The ports of Maine, though acquiring prominence in other fisheries during this period, took only a small part in the whale fishery and after 1845 abandoned it altogether. Portsmouth (New Hampshire) was a whaling port for a few years, but sent out only a small number of vessels. Rhode Island took a much larger share in the industry than either Maine or New Hampshire. There were as many as 25 whaling-vessels registered at one time from Warren, and Providence and Newport each had several vessels during the years in which the industry was at the height of its prosperity. In Connecticut, New London was the leading whaling port, usually standing next to New Bedford and Nantucket in the number of vessels registered. Mystic and Stonington also had small fleets.[2]

In Massachusetts the whaling industry flourished especially. Here the industry was started, and here it reached the highest stage of development. Dozens of Massachusetts ports had vessels engaged in whaling and thousands of Massachusetts people gained a livelihood from the industry. Of the many towns engaged in whaling, New Bedford was by far the most prominent, the vessels registered there usually composing, after 1840, about half of the entire whaling fleet of the nation. Before the Revolution the little town of Nantucket had been the leading whaling port, and during the early years of this period Nantucket had the largest whaling fleet of any New England port, but the shallowness of the water on the bar at the harbor entrance prevented the entry of the large whaling-vessels of 200 and 300 tons, which came into use

[1]See *Commerce and Navigation of United States*, 1840–1860.
[2]Tower, *History of the American Whale Fishery*, 122.

during this period, and Nantucket was unable to maintain the lead. By 1830, New Bedford, with 66 vessels, was far in advance of its nearest rival; by 1840, New Bedford's fleet of 177 vessels was more than twice as large as that of Nantucket; and for the remainder of the period New Bedford, together with the other small towns near by—Fairhaven, Dartmouth, Westport, Mattapoisett, and Seppican—formed the center of the most extensive whaling operations ever carried on from any region in the world. After 1847, Nantucket, New London, Sag Harbor, and other ports began to decline as whaling centers, but New Bedford continued to develop until 1857, at which time its fleet numbered 329 vessels, valued at more than $12,000,000 and employing over 10,000 seamen.[1]

The closing years of this period marked the beginning of a decline of the whale fishery. Whales were becoming scarcer, the risk and danger involved in expeditions to Arctic latitudes made the chances of profit very uncertain, and the rapidly expanding manufacturing industries of New England offered a more favorable field for investment. Moreover, just as the production of whale oil began to fall off and its price was advancing, a new source of oil was found in the petroleum fields of Pennsylvania. For many years the countless barrels of oil brought home by the New England whalers had furnished light for many homes, streets, and lighthouses in America and Europe; but the whale-oil lamps and the spermaceti candles were soon to give way to illumination by kerosene, and whale-oil lubricants also were eventually to be displaced by other animal oils and by petroleum products. The prosperous days of the whalers ended when oil poured forth from the rocks beneath the surface of the earth at Titusville, Pennsylvania.

THE COD FISHERY.

In Chapter IX it has been noted that the cod fishery in 1789, though it had partially recovered from the effects of the long suspension of the industry during the Revolutionary War, was by no means as profitable as it had been during colonial days. When the new Government imposed import duties on molasses, rum, hooks and lines, lead, cordage, duck, hemp, twine, and other articles used extensively by the fishermen, the small margin of profit was almost entirely extinguished. Appeals from the members of Congress from New England caused a reduction of the duty originally proposed on molasses and also secured the insertion in the tariff act of a clause allowing, in lieu of a drawback of the duty on salt used in curing fish, a bounty of 5 cents on every quintal of dried fish and a like amount on every barrel of pickled fish exported abroad.[2] The relief afforded by these bounties was not adequate to offset the losses occasioned by the increased cost of salt

---

[1] Tower, *History of the American Whale Fishery*, 54.

[2] *U. S. Statutes at Large*, I. 27.

and other fishing equipment; moreover, as was pointed out by some Marblehead fishermen, the bounty on exports did not usually afford relief and assistance to the men actually employed in fishing.[1] So unprofitable did fishing for cod become that, in 1790, 33 vessels of Marblehead were withdrawn from service.[1] The General Court of Massachusetts sent a memorial to Congress calling attention to the low state of the industry and asking further relief. The memorial was referred to Thomas Jefferson, then Secretary of State, who, in 1791, made a report to Congress in which he recited the facts presented in the memorial, enumerated the advantages possessed by American fishermen, and called attention to the disadvantages imposed upon them by the provisions of the tariff law of 1789.[2]

Congress, realizing the inadequacy of the previous measure for relief from the burden of the salt duty, in February 1792 enacted a law which would afford assistance directly to the fishermen.[3] The bounties on the exportation of dried and pickled fish were discontinued, and the drawback of the duty on imported salt was commuted to allowances to the owners and crews of the vessels engaged in the cod fishery. The allowances were proportioned in accordance with the amount of salt likely to be used on the various vessels. Craft of from 5 to 20 tons received each year $1 per ton; those between 20 and 30 tons received $1.50; and those above 30 tons received $2.50, the maximum annual allowance for a single vessel not to exceed $170. To be entitled to the allowance the vessel had to be engaged in the cod fishery at least 4 months during the regular season, which extended from the last of February to the last of November. Three-eighths of the allowance was paid to the owner of the vessel, and the remainder was divided among the crew in proportion to their individual catch of fish.

In May 1792, because of the passage of an act fixing a bushel of salt for the payment of duty at 56 pounds, although a bushel was by measurement usually from 70 to 80 pounds, the allowances were increased 20 per cent, and at the same time a bounty of 8 cents was granted on every barrel of pickled fish exported.[4] When in 1797 the duty on salt was raised from 12 cents to 20 cents a bushel, the bounty on exports of pickled fish was increased to 12 cents a barrel, and the rate of allowances to vessels engaged in the cod fishery was increased one-third, or to amounts ranging from $1.60 to $3.50 per ton per year, with a maximum annual allowance of $272 to a single vessel.[5] In 1807, when the duty on salt was removed, the bounties and allowances were both discontinued,[6] but when in 1813 a duty of 20 cents a bushel was again placed on salt, the system of bounties and allowances was reestablished;[7] 20 cents was paid on every barrel of pickled fish exported, provided it

---

[1]American State Papers, *Commerce and Navigation*, I, 15. [2]*Ibid.*, 8.
[3]*U. S. Statutes at Large*, I, 229. [4]*Ibid.*, 260. [5]*Ibid.*, 533. [6]*Ibid.*, II, 436. [7]*Ibid.*, III, 49.

had been cured with imported salt upon which the duty had been paid and the scale of allowances fixed by the act of 1797 was restored. The duty on salt and the allowances were to continue for one year after the conclusion of peace with England, but by a subsequent act they were continued without limitation.[1] In 1819 the rate of allowances was again raised, because it was thought the amounts previously paid were not large enough to constitute a drawback of the entire duty on the imported salt used in the cod fishery.[2]

By the act of 1819 the following rates were established: On vessels measuring from 5 to 30 tons, $3.50 per ton; on vessels measuring more than 30 tons, if employed in the cod fishery at least 4 months during the year, $4 per ton; on vessels measuring more than 30 tons, having a crew of not less than 10 persons and employed at sea exclusively in the cod fishery for 3½ months during the year, $3.50 per ton. Vessels on which allowances were paid under this law had to be inspected as to seaworthiness, equipment, and the number and nationality of their crews. The master and three-fourths of the crew must be citizens of the United States. Fishermen on the vessels were to be paid by division of fish or by a share in the proceeds of the sale of the fish caught. A regular log-book had to be kept day by day, arrivals and departures had to be recorded with the proper Government officials; the time the vessel must be employed at sea was 4 months, though it did not have to be in continuous voyage; and if the vessel measured over 30 tons it was entitled to a certain allowance if at sea only 3½ months. In 1830 the duty on salt was reduced to 15 cents a bushel;[3] it fell to 8 cents a bushel by 1842,[4] and was changed to 20 per cent ad valorem in 1846, the duty amounting thereafter to less than 2 cents per bushel.[5] Notwithstanding the reduction of the salt duty, the allowances to vessels engaged in the cod fishery were continued. Several attempts were made to secure their repeal or modification, both because of the reduction of the salt duty and because of changes in the fishery which helped further to make the amounts of the allowances proportionately larger than the sums paid as salt duties, but it was not until 1866 that the system was discontinued. The bounty on exports of pickled fish was replaced in 1846 by a drawback of the duty on foreign salt used in preparing fish for export.

The assistance given by the Federal Government and the increased range of foreign markets proved beneficial to the cod fishery. From about 25,000 tons in 1790[6] the gross tonnage of the New England fleet grew to 42,746 tons in 1798. Trouble with France and England caused a temporary depression from 1799 to 1801, but by 1802 the

[1] *U. S. Statutes at Large*, III, 254. [2] *Ibid.*, 520. [3] *Ibid.*, IV, 419.
[4] *Ibid.*, V, 548, sec. 4. [5] *Ibid.*, IX, 42, sec. 3.
[6] In 1790, the tonnage of the cod, whale, and mackerel fleets combined was 28,348 tons. The figures given for 1798 were for the cod and mackerel fisheries. The mackerel fleet at that time was unimportant. *Report of U. S. Commissioner of Navigation, 1910*, p. 211.

tonnage was as large as it had been in 1798, and by 1807 it had increased to 70,306 tons. The embargo and non-intercourse acts caused another depression, and though the tonnage figures for 1811 (43,234) indicated a partial recovery of the industry, the war with England intervened, not only putting a stop to further development, but causing the tonnage to shrink to the lowest point ever recorded since the establishment of the Federal Government. After the war recovery was rapid, the gross tonnage rising to 76,078 tons in 1819, the highest point reached up to that time. From 1820 to 1860 the cod fishery was generally prosperous, and though there were occasional periods of slight depression, the industry on the whole showed a gradual and steady development. The highest tonnage ever employed in the cod fishery was for the year 1860, when it reached 136,654 tons, gross tonnage.[1]

During the war of 1812 the visits of the New England vessels to the northern fishing-grounds were discontinued. After peace was established the British authorities in Canada tried to prevent the resumption of this branch of the fisheries by the vessels of the United States. It was asserted by the British Government that, because of the war of 1812, the citizens of the United States had forfeited the privilege given them by the treaty of 1783 to fish in waters under British jurisdiction. The United States Government, however, claimed that the rights and liberties in regard to the fisheries bestowed by the treaty of 1783 were held by the same tenure as the political independence of the United States, which had been granted by the same treaty, and that the former had not been abrogated by the war of 1812 any more than the latter had been forfeited. In the negotiations leading to the Treaty of Ghent the commissioners of the two countries were unable to come to an agreement respecting the fishing rights each was to retain, and the treaty was eventually concluded without any reference being made to the subject. In 1815, British naval authorities, in pursuance of the policy adopted by their Government, seized several fishing-vessels of the United States and took them to Halifax. The vessels were soon released, and when President Monroe protested vigorously against the seizure the British Government disavowed the act. The affair indicated the need of a definite settlement of the fisheries question and negotiations were opened which led to the convention of 1818. By this convention the United States surrendered the right to participate in some of the inshore fisheries along parts of the coast of British possessions in America, but secured greater facilities for drying and curing fish than had been granted by the Treaty of Paris. However, the con-

[1]Tonnage in the cod fishery by decades, 1820 to 1860:

1820	60,842 tons.
1830	61,554 tons.
1840	76,035 tons.
1850	85,646 tons.
1860	136,654 tons.

Average annual tonnage by decades, 1830 to 1860:

1830–40	65,100 tons.
1840–50	68,200 tons.
1850–60	101,300 tons.

Commerce and Navigation of the United States, 1860, p. 670. Statistics for 1820 include cod and mackerel fisheries.

vention, though adjusting the differences between the two countries for a time, did not enter into details sufficiently to afford a basis for settling questions which arose later, and it was not many years before new disputes made necessary the negotiation of another treaty. The convention of 1818 marked the beginning of the history of the "fishery question," which subject will be discussed in a separate chapter.

The cod continued throughout this period to be the most important food-fish taken from American waters. There are no statistics of the quantity caught annually, but the gradual increase of the size of the fishing-fleet indicated that the amount grew constantly. In 1859 the value of the products of the New England cod fishery was about $3,000,000.[1] The exports of dried fish reached a maximum of 567,828 quintals in 1804, and though the catch of subsequent years was much larger, the growth of domestic consumption caused a decline in the volume of exports. From 1790 to 1807 the chief foreign markets were Spain, France, Portugal, and the West Indies, but thereafter the exportation of dried codfish to Europe gradually declined until about 1832, after which it practically ceased, leaving the West Indies the only foreign market of any consequence. The exports of fish during the opening year of each decade from 1830 to 1860 are stated in table 63.

TABLE 63.—*Exports of domestic fish.*[1]

Year.	Dried and smoked.		Pickled.		
	Quantity.	Value.	Bbls.	Kegs.	Value.
	quintals.				
1830	229,796	$530,690	66,113	6,723	$225,987
1840	211,628	541,058	42,274	2,252	179,106
	cwt.				
1850	168,600	365,349	19,330	1,228	91,445
1860	219,628	690,088	33,815	2,433	191,634

[1]Compiled from *Commerce and Navigation of the U. S.*, 1830–1860.

Massachusetts and Maine were the leading States in the cod fishery, though New York and the other three coast States of New England had small cod-fishing fleets. The cod fishery of Maine gradually increased during this period, until in the last decade it passed that of Massachusetts. Many new settlements were planted along the Maine coast after 1789, and from Kittery to Calais there was not a single village or town where a fishing industry of some kind was not vigorously pursued. Portland and Castine became centers for fitting out fishing-vessels, as many as 500 being equipped annually at Castine in 1850.[2] Massachusetts, though retaining the lead as a fishing State and dominating the whale and mackerel fisheries, fell to second place in the cod fishery. The output of the cod and mackerel fisheries of Massachusetts

[1]U. S. Census 1860, *Miscellaneous Statistics*, 550.
[2]McFarland, *History of the New England Fisheries*, 180.

in 1859 had a value of about $2,600,000 as compared with a value of $1,009,000 for the output of the cod and mackerel industries of Maine.[1] In Massachusetts, too, practically every coast town possessed valuable fishing interests. Marblehead, which had been the leading fishing port of Massachusetts for a number of years before the Revolution, declined relatively in importance during the period. After 1818 Gloucester gradually came to the front as a fishing center, and before the end of the period led all the fishing ports of the United States. The value of the products of the Gloucester fishing industries in 1859 was $1,277,000, nearly half of the entire output of Massachusetts, exclusive of the product of the whale fishery. The fishing fleet of Gloucester in that year contained 301 schooners, employing over 3,500 men and boys.[2] Newburyport held a position of importance in both the cod and mackerel fisheries, and Beverly maintained a number of vessels in the cod fishery. Boston remained the important center of the fish trade, and also furnished a large part of the equipment for the fishing-vessels of Massachusetts and the other New England States.

TABLE 64.—*Estimated number, tonnage, and persons employed in crews in cod fishing in 1853.*[1]

State.	No. of vessels.	Tonnage of vessels.	No. of persons in crews.
Maine	1,269	63,477	8,883
Massachusetts	1,138	56,919	7,966
Connecticut	125	6,228	875
New Hampshire	43	2,137	301
Rhode Island	10	475	70
New York	8	401	56
Total	2,593	129,637	18,151

[1]McFarland, *History of the New England Fisheries*, 171.

THE MACKEREL FISHERY.

Previous to 1819, the mackerel fishery of the United States was relatively unimportant, the total recorded product of the industry for the 15 years preceding that date being only about 235,000 barrels.[3] Before that year, the fish were used largely as bait for cod, and those which were caught for food were taken fresh to market. The first trip for mackerel to salt on board the vessel taking them was made in 1818. Thereafter the mackerel fishery developed rapidly, and in 1831 about 450,000 barrels were salted in Maine, New Hampshire, and Massachusetts.[4] After 1831 the industry declined for a time, but about 1840 it began to revive and continued to be prosperous for the greater part of the next 20 years. The mackerel fishery is always subject to great fluctuations. Unlike the cod, the supply of which is fairly uniform, the mackerel are found in widely varying quantities and in different localities from season to season. The purse-seine did not come into general

[1]U. S. Census 1860, *Miscellaneous Statistics*, 550.
[2]McFarland, *History of the New England Fisheries*, 194. [3]*Ibid.*, 142. [4]*Ibid.*, 171.

use for catching mackerel until late in the century, and as long as the fish had to be caught with hook and line, the quantity taken in some years was small, because of the refusal of the fish to bite. One example of the fluctuations which sometimes occurred is shown in the statistics of the Massachusetts fishery in 1859 and 1860, the product for the former year being 99,715 barrels and that for the latter 235,685 barrels. The average catch of mackerel from 1820 to 1860 was about 200,000 barrels a year.[1]

The gross tonnage of the mackerel fleet of the United States in 1830, the first year in which statistics of its tonnage were separately recorded, was 35,973 tons.[2] In 1840, when the product of the fishery was at one of the lowest points, the fleet measured 28,269 tons, but by 1850 it had risen to 58,111 tons.[2] The maximum tonnage for the period was reached in 1849, when it amounted to 73,853 tons; in 1852, it was 72,546 tons. The poor season of 1859 was reflected in the diminution of the fleet to 26,110 tons in 1860.[2]

Massachusetts possessed by far the largest part of the mackerel industry throughout the entire period. Maine had a mackerel fleet, but the mackerel fishery of that State failed to grow as rapidly as its cod fishery. Fishermen of New Hampshire also engaged in the mackerel business, but only on a small scale. In Massachusetts, Boston was the leading mackerel port almost continuously until 1840, when Gloucester took the lead and has ever since retained it. Newburyport engaged extensively in both the mackerel and the cod industries; Wellfleet had an important interest in the mackerel fishery, usually ranking next to Gloucester and Boston after 1845; and Hingham, Cohasset, and Provincetown each held high rank in the quantity of mackerel taken and cured.[3]

HERRING, HALIBUT, MENHADEN, OYSTER, AND LOBSTER FISHERIES.

The period from 1789 to 1860 marked the beginning of several important fisheries in New England, some of which in subsequent years were to exceed in extent the long-established cod and mackerel industries.

The herring fisheries in the vicinity of the Magdalen Islands were extensively developed, and many fishing towns along the Maine coast from the Penobscot to the St. Croix produced large quantities of smoked and pickled herring. Between 1845 and 1865 there were pickled annually at Lubec from 400,000 to 500,000 boxes of smoked herring; Eastport, Millbridge, Hancock, and several other towns also engaged extensively in the business of catching and curing herring.[4]

As early as 1819 halibut were found at George's Bank, though it was not until about 1830 that the business of catching this fish for market was started in a regular manner. Halibut were usually brought

[1] MacFarland, *History of the New England Fisheries*, 172.
[2] *Commerce and Navigation of the United States, 1860*, p. 670.
[3] McFarland, *Ibid.*, 187. [4] *Ibid.*, 178.

to port alive and packed in ice for shipment. The extreme risk involved in the fishery, which was carried on only in midwinter, tended to discourage its development, though by 1851 Gloucester employed about 75 vessels in it.[1] The catch that year was valued at upwards of $60,000. The hake fishery of Frenchman's Bay was also developed to some extent between 1840 and 1860, and considerable quantities sold at Portland and Boston.[2] Shad fisheries were carried on locally in nearly all the important New England rivers.

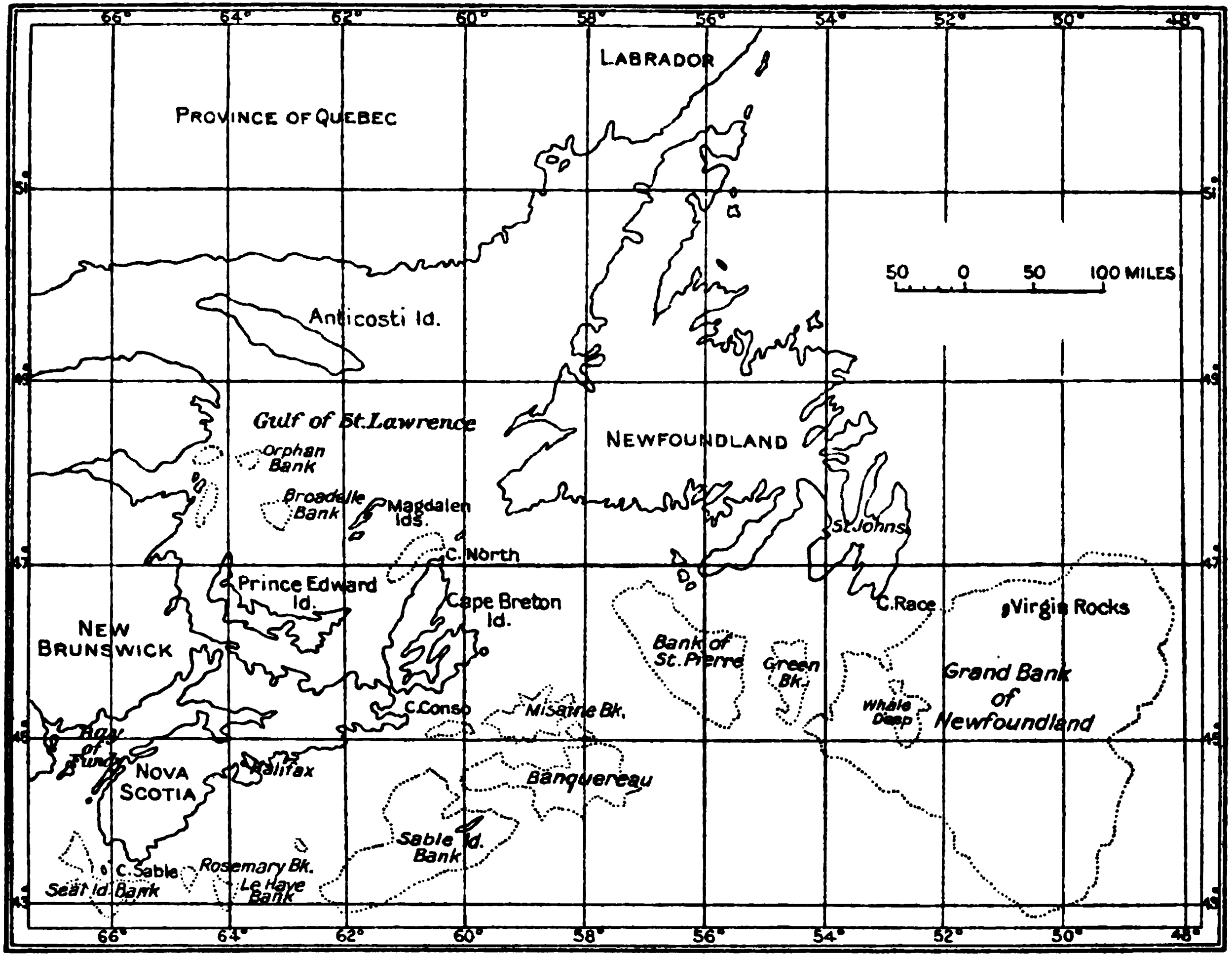
The menhaden oil and fertilizer industries also started during this period. The use of fish as fertilizer began at a very early period in colonial history. For a long time food-fish, such as the alewife and shad, were employed for this purpose, but as these fish grew in value the bony "mossbunkers" or white-fish, as the menhaden were usually called, were introduced as fertilizing material, and the farmers along the coast caught them in large quantities to spread over their fields. As early as 1812 the inhabitants of Rhode Island began to use various fish oils as substitutes for more expensive paint oils.[3] By 1830 the process of extracting oil by steam-cooking and pressing the fish was brought into use. By 1850 there were a number of small establishments along the New England coast engaged regularly in manufacturing menhaden oil, and the introduction of the purse-seine for catching the fish about that time greatly stimulated the industry. At first the refuse part of the menhaden, from which the oil had been pressed, was thrown away, but it was soon discovered that it could be used as fertilizer just as the entire fish had been used. The possibility of securing two useful products by the same process enhanced the commercial importance of the menhaden and opened the way for a great development of the menhaden fishery.

The practice of transplanting oysters from Chesapeake Bay to the shore waters of Rhode Island and Connecticut was begun about 1840. The value of the oyster fishery of Connecticut in 1860 was about $610,000.[4] Fair Haven, Connecticut, was one of the first places in New England to which oysters were transplanted, the seed oysters being secured first from New Jersey and later from Virginia.[5] So large did the oyster business at Fair Haven become that some of the establishments maintained branch houses in cities as far west as St. Louis and Chicago.

The lobster fishery began to assume a position of commercial importance about 1830, when vessels from Boston began to make regular trips to the Maine coast to secure supplies of fresh lobsters. In 1843 the business of canning lobster was started in Maine.[6] By 1860 the industry had developed to an extent sufficient to indicate that it would eventually take a high rank among the domestic fishing industries.

---

[1] Sabine, *Report on Principal Fisheries* (House Exec. Doc. No. 23, 32 Cong., 2 sess., p. 373).
[2] McFarland, *History of the New England Fisheries*, 179.
[3] Goode, *Fisheries and Fishery Industries of the United States*, sec. v, I, 366.
[4] U. S. Census 1860, *Miscellaneous Statistics*, 551.
[5] McFarland, *History of the New England Fisheries*, 197. [6] *Ibid.*, 232.



Map 8. Fishing Grounds of Newfoundland, Cape Breton Island, Gulf of St. Lawrence, and Nova Scotia.

(From McFarland's *History of the New England Fisheries.*)

CHAPTER XXXII.

THE FISHERIES OF NEW ENGLAND SINCE 1860.

Development and conservation of the fisheries of the United States since 1860, 169. The change in the relative importance of fish products, 170. The whale fishery, 1860 to 1910, 171. Destruction of whaling vessels during Civil War, and subsequent decline of the whaling industry, 171. Cod and mackerel fisheries, 1860–1910, 173. Tonnage of vessels in the cod and mackerel fisheries, 1870–1910, 174. The herring, shad, squeteague, and menhaden fisheries, 175. The shellfish fisheries, 177.

There has been since 1860 an extensive development of the various fisheries of the United States. The increase in population, the growth of the transportation system, and the introduction of improved methods of preserving and transporting the products of the fisheries have greatly increased the extent and range of the market for food-fish and permitted the exploitation of all the fishing resources of the country, many of which, before 1860, were of little commercial importance. With the development of the inshore fisheries of the Atlantic coast, the lake fisheries, and the Pacific coast fisheries, there has been a decline in the deep-sea fisheries, which were for many years such a vital factor in the commercial life of New England; but notwithstanding the decline of these long-established industries, there has been a steady advance in the fishing industry as a whole, and even in the New England States, which have always held a practical monopoly of deep-sea fishing, the total products of the fisheries are as great now as at any previous time.

Though the fishing industry has developed greatly during the past half century, it no longer occupies the important position which it once held in the commercial and economic life of the nation. Compared with the value of the product of manufacturing, agriculture, or mining, the annual value of the products of the fisheries is small. Once listed among the leading exports of America, the products of the fisheries make up at the present time less than 0.5 per cent of the total value of exports; and for nearly a score of years the imports of fish into the United States have exceeded the exports. In New England, where throughout the eighteenth century and the early part of the nineteenth century, commercial prosperity depended largely on the fisheries, to-day dozens of factories have an annual output of greater value than the annual product of all the fishing industries of that section. At one time the whale, cod, and mackerel fleets of the New England States formed as much as a fourth of the tonnage of their merchant marine; to-day they make up less than one-fiftieth.

Like the other natural resources of the United States, the fisheries have been used in a wasteful manner, but fortunately a policy of conservation was adopted before they were exhausted, and if the present method of caring for and replenishing this portion of the natural wealth

of the country is continued, all the important fisheries may in time be restored to their original abundance. One of the most notable features of the history of the fisheries has been the conservation work of the Federal and State governments. Thorough and careful studies of the various fisheries have been made, regulative measures have been adopted to prevent useless destruction, economical methods of utilizing the products have been worked out, and fish-culture on a large scale has been resorted to for the purpose of increasing the supply of many varieties of food-fish.

A comparison of the statements issued from time to time during recent years by the Bureau of Fisheries and the Census Office shows that there has been a continuous and steady growth in the quantity and value of the fishery products. Table 65 shows the increase in the value of the products of all the fisheries of the United States, not including Alaska and other outlying possessions, in the years designated.[1]

TABLE 65.—*Value of products for selected years 1880–1898.*

1880	$39,885,000
1889	42,780,000
1900–1904	[1]49,398,000
1908	54,031,000

[1]Combined statistics for various sections of the country, compiled in different years between 1900 and 1904.

These values are for the catch of fish as brought to market, either cured or fresh, by those who took them. In many instances the fishery products constituted the basis of manufacturing industries with products of considerable value. The output of the industry designated in the census reports as "canning and preserving fish" increased in value from $10,233,000 in 1890 to $28,401,000 in 1908.[2]

An interesting feature of the history of the fisheries during the past several decades has been the change in the relative importance of various products. Until 1850 practically the only fisheries of any commercial significance were the whale, cod, and mackerel fisheries. In 1908 the oyster product led all species of fish in value, the quantity marketed having a total value of $15,713,000, amounting to 29 per cent of the value of all fishery products.[3] The nearest rival of the oyster was the salmon, but the catch of salmon, valued at $3,347,000, made up only 6 per cent of the total product.[4] These two were the only species having a value greater than $3,000,000. Cod, ranking third in the list, had a value of $2,914,000, and of each of seven other species—shad, lobster, clams, squeteague, halibut, haddock, and German carp—the catch amounted in value to more than $1,000,000.

[1]U. S. Census Report, *Fisheries of the United States, 1908*, p. 10.
[2]*Ibid.*, 280. [3]*Ibid.*, 24. [4]*Ibid.*, not including the salmon product of Alaska.

Whale oil and whalebone, once the leading fishery products of the United States, made up less than 1 per cent of the total value, codfish but 5 per cent, and mackerel only 2 per cent.

In New England the fishing industry as a whole has continued to develop since 1860, and Massachusetts still holds the distinction of outranking all other States in the value of fishery products. However, with the rise of fishing industries in other sections of the United States, the New England fisheries have lost the lead which they held so long. Moreover, there has been a notable change within New England itself. The deep-sea fisheries, which were once all-important, have lost precedence to the inshore fisheries, and the whale fishery has almost reached the point of extinction.

THE WHALE FISHERY, 1860 TO 1910.

The history of the whale fishery of the United States since 1860 presents a record of steady and almost uninterrupted decline. Dr. Walter S. Tower, in his *History of the American Whale Fishery*, page 72, says:

> "Practically no other industry in the country can present any parallel to the revolution that the whale fishery has undergone in the space of sixty years. From a business representing an invested capital of tens of millions of dollars, and giving employment to tens of thousands of men, it has fallen to a place where whaling is no longer of any great importance even to the communities from which it was carried on. In fact, whaling is kept alive at all only by the demand for a product which a century ago was regarded as hardly worth saving."

Petroleum products have largely but not entirely displaced whale-oil products for purposes of lubrication, and the price of whale oil is much lower than it was during the prosperous days of whaling, notwithstanding the fact that the production is much smaller. The price of whalebone, however, has greatly increased, and the high value of this article is the only thing that enables the whale fishery to continue at all. Often during recent years only the bone has been saved from the carcasses of captured whales, the remainder being cast adrift, if other whales were in sight.

During the Civil War the whale fishery suffered disastrously from the depredations of southern commerce destroyers, at least 50 whaling-vessels being captured and destroyed. The *Shenandoah*, one of the most famous of the privateers, entered Bering Sea late in the war and took 29 vessels, of which all but 4 were burned and sunk. This wholesale destruction and the risk involved in whaling voyages caused a rapid diminution of the whaling fleet, many vessels being sold to the Government and many being transferred to other branches of the merchant marine. From 166,841 tons in 1860 the tonnage of the registered vessels engaged in the whale fishery fell to 84,233 tons in 1865, a decrease of practically one-half in 5 years.[1]

[1] *Report of U. S. Commissioner of Navigation, 1910*, p. 212.

Just after the close of the war there was a revival of whaling, but it was only temporary. The condition which had caused decadence to set in even before the war commenced, the growing uncertainty of the business, the development of manufacturing, and the competition of petroleum products, operated with increasing force to hasten the decline of the industry. In 1866 the registered tonnage rose to 105,170 tons, but the following year it was less than half that amount. There was an increase to 78,486 tons in 1868, and after that year there was a steady and continuous decline. In 1871, 34 fishing-vessels of the Pacific fleet were destroyed by the closing of the ice-pack in the Arctic Ocean, and a similar disaster destroyed a large number of vessels in 1876. The decline of the whaling industry since 1860 is shown in table 66, which gives the registered tonnage of the entire whaling fleet of the United States at ten-year periods.[1]

TABLE 66.—*Number and tonnage of the whaling fleet, by decades, 1860 to 1910.*

Year.	Registered. (Number.)	Vessels. (Gross tonnage.)	Year.	Registered. (Number.)	Vessels. (Gross tonnage.)
1860	...	166,841	1890	76	18,633
1870	299	67,954	1900	42	9,899
1880	174	38,408	1910	36	9,308

During the prosperous era of whaling there were more than 50 New England ports, as well as several ports in the States south of New England, at which whaling vessels were registered. By 1880, Massachusetts and Connecticut were the only States on the Atlantic coast possessing whaling fleets. One by one the whaling ports of these States dropped from the list, and the number of vessels registered at the other ports steadily decreased. From Nantucket, where American whaling received its start, the last whaling vessel went out in 1869.[2] At New Bedford, where whaling was carried on before the war on such a magnificent scale, the fleet dwindled from 300 vessels in 1860 to 20 vessels in 1910.[3] In the latter year the only other port on the Atlantic coast at which whaling vessels were registered was New London, which had 2 sailing-vessels, of a total tonnage of 482 tons. In 1869 San Francisco became a whaling port, and being near the principal whaling-grounds, it possessed a decided advantage over the Atlantic ports, and a large part of the New England interests was transferred to the Pacific coast. Even in San Francisco, however, whaling reached the climax of prosperity about 1892, and since then has steadily declined. In 1910 there were 14 whaling vessels registered there—5 sailing and 9 steam—of a total gross tonnage of 4,720 tons, approximately one-half of the tonnage belonging to the whole country.[4]

[1] *Report of U. S. Commissioner of Navigation, 1910*, p. 212.
[2] Tower, *History of the American Whale Fishery*, 69.
[3] *Report of U. S. Commissioner of Navigation, 1910*, p. 207.
[4] The value of whale products taken by vessels of the United States was as follows during the years designated: 1880, $2,324,000; 1889, $1,404,000; 1899, $722,000; 1908, $497,000. U. S. Census Report, *Fisheries of the United States*, 1908, p. 77

COD AND MACKEREL FISHERIES, 1860 TO 1910.

The cod and mackerel industries of New England reached the point of maximum development during the early years of the Civil War, the tonnage of vessels engaged in both fisheries in 1862 amounting to 204,197 tons, the highest figure recorded during their history. Though these fisheries have not undergone such a decline as the whaling industry has suffered, they have diminished in importance and for several decades have not held the commanding rank among the fisheries that they once possessed. By 1866 the tonnage of the vessels engaged in the cod and mackerel industries had fallen to 98,231 tons, and though the fisheries remained fairly prosperous for a score of years, they failed to regain their former state of prosperity, the fleet reaching a gross tonnage of more than 100,000 tons in only one year (1873). Since 1885 the deep-sea fishing industry has suffered a marked decline. The rapid increase of the production of cheaper kinds of food-fish, such as oysters, salmon, sardines, herring, and shad—cheap because of the small expense incurred in taking and preparing them for market—caused a lessened demand for the costly deep-sea fish which for so long were standard. Many of the ports of Maine and Massachusetts, which for over a century possessed large numbers of schooners and other fishing-vessels making regular trips to the Grand Banks off Newfoundland and Nova Scotia, have abandoned deep-sea fishing altogether, and their fishermen have turned their energies to the development of the inshore fisheries, finding the business of supplying fresh fish to the visitors who flock to the numerous summer resorts along the New England coast more profitable than the dangerous off-shore voyages to the distant fishing-banks. In Maine, which was the leading State in the cod fishery for a decade before the Civil War, there is now only one port engaged in the bank fishery. In Massachusetts practically all of the deep-sea fishing is carried on by vessels from Gloucester and Boston. The tonnage of the deep-sea fishing fleet has been steadily diminishing for more than a score of years. Since 1890, however, the number and tonnage of small craft employed in taking ground-fish near the shore has gradually increased and the product of the cod fishery has not been greatly diminished since that year and, in fact during recent years has usually shown a substantial annual increase. The statistics presented in table 67 of the cod and mackerel fleet at ten-year intervals since 1870 give a good idea of the state of those fisheries during this period:[1]

[1]These statistics are for the cod and mackerel industries of the entire country. Over 90 per cent of the fleet belongs to the New England States. *Report of U. S. Commissioner of Navigation, 1910*, p. 213.

In 1908 the total catch of codfish in the United States amounted to 110,054,000 pounds, valued at $2,914,000.[1] Massachusetts contributed 66 per cent of the total, Maine 18 per cent, and Rhode Island and Connecticut each a small amount. Compared with the product of 1902, the catch of cod in 1908 showed an increase of 12,000,000 pounds; the product in 1888 was 120,000,000 pounds. Of the other important varieties of ground-fish (the halibut, haddock, hake, and pollock, which like the cod are caught almost entirely with hook and line), the catch of the entire United States in 1908 was valued at $3,726,000, of which about two-thirds was credited to New England.[2] The mackerel industry in 1908 ranked fifteenth among the fisheries in respect to value of product, the total catch for the year amounting to 12,103,000 pounds, valued at $848,000. Of the total catch of 1908, Massachusetts had 86 per cent, and Rhode Island, Maine, and Connecticut about 8 per cent.[3] Compared with the catches of former years, that of 1908 showed a great decline, being the smallest quantity taken in a single year since 1898.

TABLE 67.—*Number and gross tonnage of vessels engaged in the cod and mackerel fisheries, by decades, 1870–1910.*

Year.	Enrolled vessels.		Licensed vessels.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
1870	1,561	82,612	731	8,848	2,292	91,460
1880	1,147	64,935	1,176	12,603	2,323	77,538
1890	840	61,507	619	6,860	1,459	68,367
1900	545	43,694	890	7,935	1,435	51,629
1910	395	39,079	837	8,212	1,232	47,291

A notable change in the ground-fish and the mackerel industry during recent years has been the decrease in the quantity of salted fish and a corresponding increase in the quantity of fresh fish marketed. Previous to 1860 practically all the codfish taken were cured before being taken to market. In 1888 one-third of the total catch was marketed fresh, and in 1908 only one-fourth of the catch was cured before being sold.[4] An even greater proportion of the mackerel is brought to market in a fresh state. Practically all the fish of all kinds caught near the shore and a large part of those taken by the deep-sea fishing-vessels are now carried fresh to market. The introduction of gasoline engines in the small craft employed in the inshore fisheries has greatly stimulated the growth of the fresh-fish industry in recent years. On the deep-sea vessels the fish are preserved in ice until port is reached.

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 53. [2] *Ibid.*, 56, *et seq.*
[3] *Ibid.*, 62. [4] *Ibid.*, 53.

THE HERRING, SHAD, SQUETEAGUE, AND MENHADEN FISHERIES.

Though of less value than shellfish, cod, or mackerel, the herring, shad, squeteague, and menhaden are important fishing-products of New England.

The herring fishery has been prosperous throughout the period since the Civil War, the total amount of herring taken in the United States rising from 43,000,000 pounds in 1880 to 125,000,000 pounds in 1908. Maine has always led in the herring fishery, and in 1908 was credited with about three-fourths of the catch, the only other important State being Massachusetts, with 23 per cent of the total quantity taken.[1] Three industries, the frozen-herring industry, the smoking and pickling of herring, and the canning of sardines arise from the extensive herring fishery. Frozen herring have been used for more than half a century as bait for ground-fish, and as the deep-sea fisheries have prospered or declined, the frozen-herring industry has arisen or fallen in importance. For more than a score of years after the Civil War a large number of vessels visited each winter the shores of Newfoundland and Nova Scotia to secure herring to be frozen and sold to the New England deep-sea fishermen. Since 1881, the Nova Scotia frozen-herring trade has dwindled away, but a small fleet of vessels still goes to the west coast of Newfoundland, the Bay of Islands being the chief point of its operations.

The smoked and pickled herring industry, as before 1860, centers around Lubeck and Eastport, in Washington County, Maine, where several million pounds of herring are prepared each year. By far the largest part of the herring used in this branch of industry come from the Passamaquoddy region, the fish no longer visiting the waters around the Magdalen Islands, as in former years.

The most important branch of the herring industry, and at the same time one of the leading fishery industries of the United States, is sardine canning. The practice of using small herring taken along the Maine coast as a substitute for the European sardine began in 1875, when the first sardine cannery established in the United States was put up at Eastport. Maine has always held a virtual monopoly of the sardine-canning business. Ten years after the first cannery was erected, there were 30 canneries in the State, turning out a product valued at more than $1,000,000. In 1900 the value of the sardine product of Maine was more than $4,000,000, and in 1908 the canneries of that State produced 68,216,000 pounds of sardines, valued at $4,732,000. The product of the Massachusetts establishments in 1908 was 2,322,000 pounds, valued at $369,000.[2]

The shad fishery is one of the most valuable fisheries of the United States, ranking next to the oyster, salmon, and cod fisheries. Most of the shad are taken from the rivers of the Middle and South Atlantic

[1] U S. Census Report, *Fisheries of the United States, 1908*, p. 58. [2] *Ibid.*, 284.

States, however, and the quantity caught in New England is relatively small, the catch in 1908 being valued at less than $75,000.[1] Like the salmon, the shad is anadromous, spending most of its life in the ocean and ascending the rivers for the purpose of spawning. The largest part of the New England catch of shad comes from the rivers of Maine and Connecticut. In many New England rivers the shad, as well as other species of anadromous fish, have completely disappeared on account of the construction of impassable dams and the pollution of the water with refuse matter from manufacturing plants. During the past few decades both the Federal Government and the State governments of New England have taken steps toward the conservation of the shad. Fishways have been erected to permit their passage over the dams to their spawning-grounds, the season for catching the fish has been limited, and fish hatcheries have been established for the artificial propagation of young shad to be planted in the large streams.

The alewife or river herring is another anadromous fish that is found in large numbers all along the Atlantic coast. It ranked twenty-first in value among the fishery products in 1908. Like the shad, it is found in greater abundance in the rivers of the Middle Atlantic States than in those of New England, but it has formed an important part of the local supply of food-fish in New England since colonial days, and considerable quantities are still brought fresh to the Boston fish markets. This species is also used as bait for deep-sea fish, and in Connecticut many hundreds are salted for the export trade. The total catch of alewives in New England in 1908 was valued at $81,000, one-half of which was contributed by Massachusetts.[2]

During the last half century the weakfish or squeteague has steadily advanced to a position of considerable importance among the fishery products of the United States. In 1908 this species ranked seventh in value, the catch for the year amounting to 50,000,000 pounds, with a value of $1,776,000. Most of the squeteague taken are caught along the shores of New Jersey and Delaware, but in each of the New England States south of New Hampshire a considerable number are taken each year. The catches of Rhode Island and Massachusetts in 1908 were valued, respectively, at $72,000 and $58,000.[3]

The menhaden fishery of New England has been of but little importance since 1879, which was the last year in which the menhaden appeared north of Cape Cod in large numbers. Receiving its first start during the decade before the Civil War, the menhaden industry of New England grew steadily until 1877, at which time there were upwards of 60 menhaden oil and fertilizer factories on the New England coast, representing an investment of $3,000,000 and turning out annually a product with a value of more than a million dollars.[4] In 1880,

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 71. [2] *Ibid.*, 34. [3] *Ibid.*, 40.
[4] McFarland, *History of the New England Fisheries*, 225.

because of the diminution of the supply of fish, many of the factories were closed. In Maine the industry was completely suspended, and in the other New England States there was a great reduction in the output of oil and fertilizer. The decline of the industry has steadily continued almost ever since. In 1908 the catch of menhaden in New England was valued at $142,000, nearly all of which was credited to Connecticut and Rhode Island.[1] The menhaden factories of Maine were not operated at all during that year

THE SHELLFISH FISHERIES.

Nothing emphasizes more forcibly the change that has taken place in the New England fisheries than the fact that at the present time the oyster outranks in value any other fishery product of the section. It is only during recent years that the oyster fishery of New England has assumed a position of importance, and while the industry there does not approach the extent of the fishery of the Chesapeake Bay district, it has made such rapid progress that the census of the fisheries taken in 1908 showed that from the standpoint of value Connecticut led all other States in the production of oysters.[2] The practice of transporting oysters from Virginia to the southern coast of New England, which was carried on to some extent before the Civil War, was resumed after the close of the war and continued until about 1885. The production of oysters has increased steadily ever since the industry was established. The output in Connecticut, where the yield has been greatest, increased from a value of $386,000 in 1880 to $1,062,000 in 1889, and in 1908 to $2,583,000.[3] The product of all New England increased from 537,000 bushels, valued at $655,000, in 1880, to 5,332,000 bushels, valued at $3,771,000, in 1908.[4] The product of Rhode Island in the latter year was valued at $969,000, and that of Massachusetts at $218,000.[2] The oyster product of Maine is relatively insignificant. Of the Connecticut oysters produced in 1908 approximately two-thirds, representing more than one-half of the value, were sold as seed oysters for replenishing old beds or starting new ones.[2] Practically all the oyster beds of New England are privately owned.

Next to the oyster, the lobster is the most valuable of the shellfish of New England. It ranked fifth among the fishery products of the United States in 1908, and of the product of 15,279,000 pounds, valued at $1,931,000, 96 per cent was credited to New England, 66 per cent to the State of Maine alone.[6] For more than two decades the lobster product of New England has had an annual average value of more than $1,250,000. The lobster fishery first assumed a position

---

[1] U. S. Census Report. *Fisheries of the United States, 1908*, p. 63. [2] *Ibid.*, 67.

[3] *Ibid.*, 92. This amount represents the value of oysters taken by Connecticut fishermen. A considerable portion of the product of 1908 was taken from the waters of Long Island and Rhode Island.

[4] U. S. Census Report, *Fisheries of the United States, 1908*, p. 68. [5] *Ibid.*, 61.

of commercial importance about 1842, with the establishment of a lobster cannery in Maine. For a number of years there was no regulation of the fishery, and because of the practice of using young lobsters for canning purposes there soon came to be a great diminution of the supply. In 1879 the legislature of Maine enacted a law prohibiting the canning of lobsters except from April 1 to August 1, and four years later enacted another measure making it illegal to can lobsters less than 9 inches in length.[1] Since 1884 all the New England States have passed laws to protect the lobster fishery, and in no State can lobsters of less than 9 inches in length now be taken, and in all the States the destruction of the "berried" lobsters, as the females carrying eggs are called, is prohibited. In Maine the lobster-canning season was curtailed again in 1891, and in 1895 the minimum length of lobster that could be had for canning was fixed at 10½ inches. The last act put an end to the lobster-canning industry, but failed to check the steady diminution of the supply of lobsters. About 1885 both the United States Bureau of Fisheries and some of the State officials of New England began the artificial propagation of lobsters in an attempt to check the rapid decrease of the fishery. The early efforts in this direction were attended with but little success, but in 1905 a method of rearing the young lobsters through the early stages of larval helplessness was developed, and since then the lobster fishery has been slowly gaining. If the policy of conservation as pursued at present is continued, there is no longer any danger that this valuable fishery will become exhausted.

The clam fishery of New England has been carried on since colonial times and at present ranks sixth in value among the fisheries of that section, the product in 1908 amounting to 905,000 bushels, valued at $732,000.[2] In common with the other inshore fisheries, the clam industry has developed chiefly during the last half century, having been of little commercial significance during the years before 1860. In both Maine and Massachusetts, where the important clam fisheries of New England are found, the clam is the basis of a canning industry of some importance. Since 1898 there has been a steady reduction in the quantity of clams taken each year, and investigations and experiments are now being made with a view to devising methods of restoring the clam fishery to its former position.

---

[1] McFarland, *History of the New England Fisheries*, 233.
[2] U. S. Census Report, *Fisheries of the United States, 1908*, p. 52.

CHAPTER XXXIII.

THE FISHERIES OF THE ATLANTIC AND GULF COASTS.

Fish resources of the Atlantic and Gulf coasts, 180. Extent and value of the fisheries, 182. Statistics for 1908, 183–184. Statistics of Gulf fisheries in 1908, 185. The shellfish fisheries, 185. Quantity and value of oyster fishery in 1908, 186. Early methods of marketing oysters, 187. Shucking and canning of oysters, 189. Prosperity of the oyster business after 1850, 189. Oyster planting and culture, 190. The oyster industry in the South Atlantic and Gulf States, 192. The clam and crab fisheries, 192. The shad fishery, 193. Establishment of shad hatcheries after 1880, 194. Quantity and value of shad fisheries in 1908, 195. Shad fishery of the Chesapeake Bay and Delaware River, 195. Other fisheries, 196. The rise and decline of the sturgeon fishery, 196. The menhaden oil and fertilizer industry, 199. The sponge fishery, 201.

Though the fisheries of the eastern coast of the United States, exclusive of New England, are now the most extensive and valuable of all American fisheries, it is only since the middle of the nineteenth century that they have reached a position of high rank. Throughout the colonial period, while the fisheries were one of the most important factors in the economic, commercial, and political development of New England, the fishing resources of the colonies farther south were generally neglected; and during the half century following the establishment of the National Government, while dozens of New England ports employed thousands of men and hundreds of vessels in the fishing industry, the fishing interests of the coast south of the Hudson River attained only a small degree of commercial importance. The early inception of the New England fishing industries and the long-continued neglect of the fisheries in the Atlantic and Gulf States were due chiefly, as has already been explained, to the differences in geographical and climatic conditions. The rigorous climate and rocky soil of New England tended to repress agriculture and the early inhabitants were quick to seize opportunities to engage in other lines of economic endeavor, such as fishing, commerce, and manufacturing.

Until near the middle of the nineteenth century, salted and pickled fish were the most important products of the fishing industry, and New England was for a long time able to supply the demand for these in the United States. Having the advantage of an early start, superior equipment, and proximity to the region of the sea where the most popular varieties of fish suitable for salting and pickling could be found in abundance, New England maintained a complete monopoly of commercial fishing. Until the development of the railway system gave means of rapid transportation to inland points, the only important markets for fresh sea-fish were the cities on the Atlantic seaboard, and the fresh fish sold in these cities were largely supplied by the New

England fishermen. With the increase of population and the development of the steam-railway service the market for fish became larger than New England could supply, and localities along other parts of the Atlantic coast, as well as along the Pacific coast and on the Great Lakes, began to take a prominent part in the fishing industry. The possibility of preserving fish during long shipments by the use of ice, and the development of canning processes, enabled many fishery products, long available only for local consumption, to compete universally with the cured cod and mackerel, and brought about a revolutionary change in the domestic fish trade, not only leading to the extensive development of fishing resources outside of New England, but transforming the character of the fishing business within New England as well.

FISH RESOURCES OF THE ATLANTIC AND GULF COASTS.

The fishing-grounds of the eastern coast of the United States south of New England are found near the shore. From New York southward the submerged "continental shelf," which forms the important fishing-grounds from New England to Labrador, becomes narrower, the line of 100 fathoms of ocean depth approaching within a few miles of the Florida coast. Moreover, the water of the ocean in this region is much warmer than that north of Cape Cod, and cod, halibut, hake, and other varieties of ground-fish indigenous to cold water are not found here. Consequently off-shore fisheries do not possess as much relative importance as the off-shore fisheries of New England, though they are by no means entirely wanting, the temperate waters of the ocean along the Middle Atlantic States and the warmer waters south being frequented by a number of varieties of fish, such as flounders, bluefish, squeteague, and snappers, which constitute the basis of valuable industries. But while the character of the ocean bottom and the temperature of the water prevent the existence of extensive off-shore fisheries, the configuration of the coast-line and the presence of numerous large rivers on both the Atlantic and Gulf slopes afford admirable conditions for large and valuable inshore and river fisheries.

Along the entire coast from New York to Texas is to be found an almost continuous series of sheltered bays, sounds, and lagoons, the shallow waters and sandy beaches of which form an incomparable home for many varieties of shellfish, both mollusks and crustaceans, such as oysters, clams, scallops, crabs, shrimp, and prawn. Of the 14 coast States in this region, 12 in 1898 had oysters as their most valuable fishery product, and in the other two oysters ranked a close second in value The sheltered water of the bays and lagoons, together with the fresh or brackish-waters of the numerous large rivers, afford an extensive feeding-ground for fish, some of which are to be found throughout the year, and others of which, particularly anadromous fish such as

shad and alewives, come at regular seasons for the purpose of depositing their spawn in the upper courses of the rivers.

That the early inhabitants of the Atlantic coast regarded the wealth of fish at hand as a valuable part of their newly settled domain is shown by numerous references in documents and letters concerning the economic resources of the country. At Jamestown, during the "starving time" of 1609, fish formed an important part of the food-supply of the perishing settlers. It was reported of the new colony that "they have thirty several sorts of Fish, River and Sea, very excellent good in their kinds, plentifull and large."[1] The Dutch settlers of New York and the Swedes who came to the shores of the Delaware commented on the variety and richness of their fisheries. William Penn, in a letter to the Free Society of Traders, said of his great estate:

"Of Fish, there is the Sturgeon, Herring, Rock, Shad, Catshead, Sheepshead, Eel, Smelt, Pearch, Roach; and in Inland Rivers, Trout, some say Salmon, above the Falls. Of Shelfish, we have Oysters, Crabbs, Cockles, Concks, and Mushels; some Oysters six inches long, and one sort of Cockles as big as the Stewing Oysters, they make a rich Broth. . . . To say nothing of our reasonable Hopes of good Cod in the Bay."[2]

In his *Further Account of Pennsylvania*, written in 1685, Penn described several of the fish and the manner of taking them, and said:

"Sturgeon play continually in our Rivers in Summer. And though the way of cureing them be not generally known, yet by a Receipt I had of one Collins . . . I did so well preserve some that I had them good there three months of the Summer, and brought some of the same so for England."[3]

In *A Relation of Maryland*, written in 1635, it is told that—

"The Sea, the Bayes of the Chesopeack, and Delaware, and generally all the Rivers, doe abound with fish of severall sorts; for many of them we have no English names: There are Whales, Sturgeons, very large and good, and in great aboundance; Grampuses, Porpuses, Mullets, Trouts, Soules, Place, Mackerell, Perch, Crabs, Oysters, Cockles, and Mussles; But above all these the Fish that have no English names, are the best except the Sturgeons."[4]

Robert Horne, in his *Description of the Province of Carolina*, written in 1666, said:

"Here are as brave Rivers as any in the World, stored with great abundance of Sturgeon, Salmon, Basse, Plaice, Trout, and Spanish Mackrill, with many other most pleasant sorts of Fish, both flat and round, for which the English Tongue hath no name."[5]

And in Thomas Ashe's *Carolina*,[6] written in 1682, there is a lengthy description of the various fishing resources of the south Atlantic coast. Practically all the broadsides and pamphlets describing the opportunities for settlers in the New World, in enumerating the list of

[1] *A Perfect Description of Virginia*, 4 (Peter Force, *Tracts*, II, No. 8).
[2] Myers (ed.), *Narrative of Early Pennsylvania, West New Jersey and Delaware*, 229.
[3] *Ibid.*, 265. [4] Hall (ed.), *Narratives of Early Maryland*, 80.
[5] Salley (ed.), *Narratives of Early Carolina*, 69. [6] *Ibid.*, 152–155.

articles which prospective colonists should take with them, mentioned a supply of fishing lines and hooks and material for building boats to be used for fishing.

But notwithstanding the extreme abundance of fish, there was, before the end of the eighteenth century, but little commercial fishing south of New England. Large quantities of fish were taken for home use by the people living near the shore, and for negroes and many of the poorer white people fish formed a staple article of food the year around. The Virginia planters regarded the rivers which washed the borders of their great estates as a valuable source of food-supply, and each plantation kept a supply of fishing equipment. Washington, in describing Mount Vernon to Arthur Young, wrote that its margin "is washed by more than ten miles of tide-water" and that the whole shore was one entire fishery.[1] In common with many other planters, Washington maintained a herring fishery as a by-industry, usually selling the surplus to Norfolk merchants, who sometimes exported small quantities to the West Indies.[2] In all the colonies north of Virginia a small oyster trade was developed during the Colonial period, but for the most part it consisted in the peddling of oysters through the villages and cities by negroes. A few vessels from New York engaged in deep-sea fishing, and from the towns at the eastern end of Long Island and from some settlements on the coast of New Jersey a small whale fishery was conducted, but at no place did commercial fisheries develop to the extent that they could be called an important part of the economic life of the people. The chief exports were products of the soil, and fishery products figured but slightly in either foreign or domestic trade.

EXTENT AND VALUE OF THE FISHERIES.

During the first half of the nineteenth century the fishing industries of the Middle Atlantic States grew slowly but steadily, the oyster fishery in particular attaining a position of some importance. The first attempt of the census officials to collect information concerning the fisheries of the entire country was made in 1840. The statistics collected for that year, though far from complete, showed that in several of the Atlantic States a number of fisheries were firmly established. In Maryland, 7,814 persons were employed in various fishing industries, chiefly in the oyster fishery. North Carolina and Maryland each produced more than 70,000 barrels of pickled fish, and North Carolina a small quantity of dried fish. New York, Delaware, and Virginia each contributed over 20,000 barrels of pickled fish, and New York ranked next to Massachusetts and Connecticut in the value of whale products reported.[3] By 1860 the products of the fisheries of the Middle Atlantic

[1] *Writings of Washington* (Sparks, ed.), XII, 310.

[2] *Documentary History of American Industrial Society*, I. Phillips (ed.), *Plantation and Frontier*, 1649–1863, I, 190.

[3] Tucker, *Progress of the United States*, 158.

States had an annual value considerably in excess of $1,000,000, made up mostly by the oyster product of New Jersey, New York, Virginia, and Maryland. The Civil War brought about almost a complete suspension of the fisheries of all the Southern States and of the Chesapeake Bay district, but with the return of peace they began to develop on a more extensive scale than ever. All the fisheries along the Atlantic coast have continued to increase in magnitude, while those of the Gulf States, which were hardly begun before the Civil War, have grown to a point of considerable value. Table 68 gives statistics of the condition of the fisheries of the entire eastern coast of the United States in 1908.[1]

TABLE 68.—*Fishery industry of the Atlantic and Gulf coasts of the United States, 1908.*

	New England States.	Middle Atlantic States.	South Atlantic States.	Gulf of Mexico division.
Number of persons employed	22,157	54,163	17,961	15,481
Capital	$11,970,000	$11,105,000	$2,324,000	$3,901,000
Vessels and boats, with outfit	8,201,000	7,280,000	1,073,000	2,805,000
Apparatus of capture	1,675,000	1,578,000	569,000	374,000
Shore and accessory properties and cash	2,094,000	2,248,000	682,000	722,000
Value of products	15,139,000	16,302,000	4,034,000	4,825,000

From the standpoint of value of product the fisheries of the Middle Atlantic States led the fisheries of the other sections, and the number of persons employed in this group of States was equal to the number employed in all the other fisheries of the Atlantic and Gulf States. The capital invested in the fisheries was only slightly less than in New England. In each State of the Middle Atlantic group the oyster is the leading product and makes up more than half the value of the fishery products of the whole group. The shad, clam, and squeteague fisheries each had a product in 1908 valued at more than $1,000,000, and the crab and menhaden fisheries each a product of more than $600,000 in value. Table 69 gives the value of the products of the most important fisheries of each of the Middle Atlantic States in 1908.[2]

It will be seen from table 69 that, as regards value, the Middle Atlantic States contributed over one-half the oyster product of the country and from one-half to two-thirds of the total product of the shad, clam, squeteague, crab, menhaden, and alewife fisheries.

Of the fisheries of the South Atlantic States those of North Carolina and Florida are the most valuable, though the oyster fishery of Georgia is rapidly giving that State a more important position. In 1908 the shad was the most valuable product of the South Atlantic fisheries, the total catch having a value of slightly less than $1,000,000. The oyster,

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 11.

[2] Compiled from U. S. Census Report on *Fisheries of the United States, 1908*. The statistics for New York and Pennsylvania include only Atlantic coast fisheries of those States.

mullet, squeteague, and alewife were in order the next most valuable products. Table 70 gives the value of the leading fisheries of this section.[1]

TABLE 69.—*Value of principal fisheries of Middle Atlantic States, 1908.*

State.	All fisheries.	Oyster.	Shad.	Clam.	Squeteague.
New York	$4,390,000	$2,553,000	$27,000	$292,000	$451,000
New Jersey	3,069,000	1,369,000	229,000	336,000	342,000
Pennsylvania	280,000	176,000	38,000	....	....
Delaware	541,000	169,000	68,000	....	29,000
Maryland	3,306,000	2,228,000	247,000	16,000	47,000
Virginia	4,716,000	2,348,000	486,000	380,000	139,000
Total	16,302,000	8,843,000	1,095,000	1,024,000	1,008,000
Total for United States	54,031,000	15,713,000	2,113,000	1,896,000	1,776,000

State.	Crab.	Menhaden.	Bluefish.	Alewife.	Cod.	Flounder.
New York	$9,000	$22,000	$291,000	$7,100	$99,000	$141,000
New Jersey	34,000	43,000	99,000	12,000	1[illegible],000	25,000
Pennsylvania	....	....	....	6,400	....	....
Delaware	13,000	152,000	....	8,400	....	....
Maryland	319,000	30,000	....	157,000	....	....
Virginia	326,000	429,000	14,000	171,000	....	....
Total	701,000	676,000	404,000	361,900	229,000	166,000
Total for United States	912,000	893,000	506,000	589,000	3,914,000	588,000

TABLE 70.—*Value of principal fisheries of South Atlantic States, 1908.*

State.	All fisheries.	Shad.	Oyster.	Mullet.	Squeteague.	Alewife.
North Carolina	$1,776,000	$373,000	$236,000	$175,000	$206,000	$140,000
South Carolina	288,000	41,000	137,000	19,000	9,000	....
Georgia	701,000	190,000	339,000	5,000	12,000	....
Florida (Atlantic coast)	1,269,000	320,000	109,000	177,000	133,000	....
Total	4,034,000	924,000	821,000	376,000	360,000	140,000
Total for United States	54,031,000	2,113,000	15,713,000	908,000	1,776,000	589,000

On the Gulf coast practically the whole development of commercial fisheries has occurred since the Civil War, but the growth has been such that in 1908, as is shown by table 71, the fisheries of this section had a total product of greater value than the fisheries of the South Atlantic division. The warmth of the waters of the Gulf and the character of the shore-line are favoring conditions for the existence of a great abundance of animal life, and the fishing resources are consequently very large. As yet they are but slightly developed, but with the increase of population and the expansion of industry in the South they will continue to grow in importance. In 1908 the oyster was the

[1] Compiled from U. S. Census Report, *Fisheries of the United States, 1908.*

leading product, representing nearly one-third of the value of all the Gulf fishery products. The red snapper, sponge, and mullet fisheries each contributed a product of over $500,000 in value, Florida possessing the only sponge fishery and a large proportion of the other two. Each Gulf State had a small squeteague industry, and the shrimp and prawn fishery, confined almost entirely to Louisiana and Mississippi, had a product valued at about $300,000. Table 71 shows the leading fisheries in 1908, giving the value of the products of each.[1]

TABLE 71.—*Value of principal fisheries of the Gulf Coast, 1908.*

State.	All fisheries.	Oyster.	Red snapper.	Sponge.	Mullet.	Shrimp and prawn.	Squeteague.
Florida (Gulf coast)	$2,120,000	$187,000	$432,000	$545,000	$475,000	......	$63,000
Alabama	358,000	173,000	92,000	......	33,000	$1,000	10,000
Mississippi	459,000	296,000	......	......	20,000	81,000	28,000
Louisiana	1,448,000	763,000	......	......	6,000	213,000	82,000
Texas	446,000	168,000	79,000	......	......	4,000	46,000
Total	4,831,000	1,587,000	603,000	545,000	534,000	299,000	229,000
Total for United States	54,031,000	15,713,000	636,000	545,000	928,000	494,000	1,776,000

To give a complete account of the development of all the numerous fisheries of the several States along the Atlantic and Gulf coasts would require the presentation of a mass of detail, most of which would be without significance beyond indicating the mere fact of their progress in magnitude and value. The statistics in the preceding paragraphs show in the main what has been the general trend of development and indicate what are the leading fishing industries at the present time. No attempt will be made to present a detailed statement of the history of all the fisheries of these sections, but a brief account of the development of the more important ones will be given.

THE SHELLFISH FISHERIES.

The oyster fishery has been for a number of years the most valuable fishing industry of the United States. The products of this fishery in 1908, made up of 33,330,000 bushels of oysters, valued at $15,713,000, constituted 29 per cent of the value of the product of all the fisheries of the country.[2] The salmon fishery, which ranked second as regards value, contributed only 6 per cent of the total value, or less than one-fourth as much as the oyster fishery. The whaling industry at the time of its greatest prosperity did not yield an annual product as great in value as that of the oyster fishery at the present time.

In 1908 an oyster fishery was reported in every State on both the Atlantic and Pacific coasts except New Hampshire. Of the total quantity of oysters produced, the States along the Atlantic Ocean

[1] Compiled from U. S. Census Report, *Fisheries of the United States, 1908.*
[2] U. S. Census Report, *Fisheries of the United States, 1908*, p. 24.

south of New England contributed 64 per cent and the Gulf States 17 per cent. Of the value of the entire output these sections produced a somewhat smaller proportion, being credited respectively with 62 and 9 per cent.[1] The greatest productive areas were those of Chesapeake Bay and Long Island Sound. Virginia and Maryland together contributed one-third of the total output, while one-fifth came from New York, Connecticut, and Rhode Island. Louisiana ranked fourth in the quantity of oysters taken, though as regards value that State held seventh place. New Jersey, ranking fifth both as to quantity and value, was one of the important oyster States, and South Carolina, Georgia, Mississippi, and Florida each produced more than 1,000,000 bushels.[2]

---

[1]U. S. Census Reports, *Fisheries of the United States, 1908*, p. 67.

[2]The following statistics, from the U. S. Census Report, *Fisheries of the United States, 1908*, p. 67, give the record of the oyster fishery of the United States in 1908:

TABLE 72.—*Quantity and value by States of oyster fishery, 1908.*

State.	Quantity.	Percentage of total quantity.	Value.	Percentage of total value.
	bushels.			
Maryland	6,232,000	19	$2,228,000	14
Virginia	5,075,000	15	2,348,000	15
Connecticut	3,948,000	12	2,583,000	16
Louisiana	3,650,000	11	763,000	5
New Jersey	2,586,000	8	1,369,000	9
New York	2,463,000	7	2,553,000	16
South Carolina	1,563,000	5	137,000	1
Georgia	1,459,000	4	339,000	2
Rhode Island	1,229,000	4	969,000	6
Mississippi	1,068,000	3	295,000	2
Florida	1,067,000	3	296,000	2
North Carolina	813,000	2	236,000	2
Alabama	590,000	2	173,000	1
Texas	497,000	1	168,000	1
Delaware	348,000	1	169,000	1
Pennsylvania	277,000	1	176,000	1
Washington	204,000	1	352,000	2
Massachusetts	155,000	..	218,000	1
California	104,000	..	337,000	2
Oregon	1,300	..	4,200	..
Maine	200	..	200	..
Total	33,330,000	100	15,713,000	100

Statistics taken for different sections since 1908 (*Report of U. S. Commissioner of Fisheries, 1913*, p. 41) give the following record of the oyster fishery for the years indicated:

TABLE 73.—*Quantity and value of oyster fishery by sections of country.*

Region.	Quantity.	Value.
	bushels.	
New England States (1910)	5,942,021	$3,597,034
Middle Atlantic States (1911–12)	18,906,076	9,263,556
South Atlantic States (1910)	1,700,998	364,184
Gulf States (1911)	6,226,141	1,476,966
Pacific Coast States (1912)	213,579	676,243
Total	32,988,815	15,377,983

When the white men came to establish settlements in the New World they found oysters in abundance along the entire Atlantic coast from New England southward, except in a few places, such as the shores of the eastern half of Long Island and the open portions of the New Jersey coast and the South Atlantic region, where there was no protection from the violence of the ocean storms. The quantity in and about New York Bay, Chesapeake Bay, and Delaware Bay was especially great. Immense beds of oysters were found all along the Brooklyn shore of the East River, all about Manhattan Island, up the Hudson River as far as Ossining, and on the New Jersey shore opposite Keyport on Raritan Bay, in the mouths of the Raritan, Hackensack, and Newark Rivers, and all around Staten Island. Even the Harlem River was noted for its oyster beds.[1] From most of these localities the oysters have long since disappeared, but their abundance in the bays and inlets on both shores of the western half of Long Island still makes the New York district one of the important oyster centers. In the Delaware, oysters were at one time found as far up as Philadelphia, and in the Chesapeake oyster-beds were found, scattered in apparently inexhaustible profusion, on nearly every part of the bay, as well as in the lower courses of the numerous rivers which empty into the bay. Oysters were nearly everywhere regarded by the early settlers as one of the valuable portions of the natural food-supply of their new country. That the oysters of New York Bay and Delaware Bay were highly prized by the colonists is indicated by the many favorable references to them in the early accounts of the colonies. The Maryland settlers on the Chesapeake do not seem to have held the oysters in very great esteem,[2] but the colonists of Virginia regarded them as one of their best and cheapest foods. In the northern localities, however, where a large number of people lived near the coast and where there was a tendency toward the congregation of population in towns and cities, the regular oyster industry had its origin.

Long before the end of the seventeenth century Indians were bringing oysters regularly to supply the New Amsterdam colonists, and Pearl Street, New York, is said to have received its name because it was paved with oyster shells during the period of Dutch occupancy.[3] By the end of the eighteenth century the fame of the New York oysters had grown so that fishermen from other colonies, especially from New England, came frequently to the New York waters to secure oysters, and it became necessary for the colonial authorities of New York and New Jersey to take steps to prevent the undue depletion and possible exhaustion of the oyster supply.[4] The oyster fishery was reserved to resident fishermen in both colonies, and a closed season was established from May to September. Despite the necessity for the enactment of

[1] Goode, *The Fisheries and Fishery Industries of the United States*, sec. v, vol. II, 511.
[2] *Bulletin* of United States Fish Commission, 1892, p. 208.
[3] Ingersoll, *The Oyster Industry* (U. S. Census 1880), 121. [4] *Ibid.*, 111.

such restrictive measures, the colonial oyster business was very small as compared to that of the present time. In the middle of the eighteenth century the best oysters sold for only 2 shillings a bushel; negroes were the principal vendors, and as late as 1815 so small were the profits to be derived from the oyster fishery that it was considered a mark of degradation to rake oysters for a living. Most of the oysters taken were consumed in the towns and villages near the source of supply; New York was the only important large market, and even there the trade remained so small that in 1825 there was only one wholesale oyster dealer in the city.[1] There was a small but growing inland trade, however. Oyster wagons made regular trips through the towns and villages near the coast, and sloops loaded with oysters were sent up the Hudson River to Albany, whence the cargoes were distributed by wagons. The shallow-water oyster-beds known to the early colonists were exhausted and abandoned, but new beds were discovered, and considerable quantities, as stated below, were brought north from the Virginia beds to supply the needs of the trade and to start new oyster beds in favorable localities near New York.

In the districts south of New York the oyster fishery developed still more slowly. The oystermen of southern New Jersey had to seek their principal market in Philadelphia, and the trade was greatly hampered because of the hard journey across the State by wagon or the long voyage by water. In the Chesapeake Bay district there were no available markets of importance and previous to 1820 there was not a single wholesale oyster establishment in the entire Chesapeake district. Considerable quantities of oysters were taken for local consumption, and many were shipped northward directly to the markets of New York and Philadelphia or to points along the New England and New Jersey coasts, where they were planted to attain a larger size or to establish new beds.

About 1825 the oyster industry began to expand rapidly. The wagon trade in the New York district had been growing steadily, and the cheaper and faster means of transportation afforded by the New York canal system encouraged the increase of business. Furthermore, about this time an oyster dealer of New Haven, Connecticut, began the practice of opening the oysters intended for shipment and sending them to consumers at a distance in small wooden kegs or other watertight receptacles.[2] It was found that the oysters would remain in good condition for several days and even weeks during the cold season. Because of the convenience and cheapness of this method of shipment it was immediately adopted in other localities. The oyster fishery was greatly stimulated and within a few years the oyster trade extended all over the country. The growth of trade was reflected in a decrease of the supply of oysters in the vicinity of New York, and the rising prices encouraged the practice of bringing larger and larger quantities

[1] Ingersoll, *The Oyster Industry* (U. S. Census, 1880), 123.
[2] Goode, *The Fisheries and Fishery Industries of the United States*, sec. v, vol. II, 559.

from Chesapeake Bay to shucking houses in the New York district. The cost of shipment of the Chesapeake oysters and the difficulties incident to the business suggested the idea that the rapidly expanding trade could be carried on more conveniently as well as more profitably by transferring the shucking-houses to the oyster-grounds of Maryland and Virginia, and in 1836 a New Haven oyster merchant established a shucking-house at Baltimore.[1] The experiment was highly successful, others soon engaged in the industry, and within a few years the Baltimore oyster trade began to assume large proportions. Lines of oyster wagons were run out to all the neighboring cities, and one wagon line extended as far west as Pittsburgh.[1] The growth of the railway system was an immense help to the oyster business, which soon held an important position among the fishing industries.

The shucking of oysters and shipment in a raw state was soon followed by a second innovation, the steaming and canning of oysters. Although the process of preserving cooked oysters had probably been known in colonial times, it was never of commercial value until about 1848, when a Baltimore dealer began to steam oysters and ship them packed in hermetically sealed tin cans.[2] Like the earlier venture at oyster packing, the canning business at once proved successful, six Baltimore establishments being engaged in the industry in 1850, turning out 400,000 to 500,000 cans of oysters a year.[3] With the growth of the shucking and canning enterprises in Baltimore and at other points in Maryland and Virginia, the oyster fishery of Chesapeake Bay developed very rapidly and soon rivaled in importance the fisheries of the districts farther north.

By 1850 the oyster business was in a prosperous and flourishing condition in practically all the areas which have since risen to great importance. Reliable statistics of the oyster industry before 1880 are not available, and it is impossible to state the extent of the fishery before that year or to present satisfactory figures for the comparison of the various districts. The fishery of the Chesapeake region was almost entirely suspended during the war, but with the return of peace it was resumed on a greater scale than ever, and within a short time was far more important than the fisheries of New York and New Jersey. About 1870 the oyster product of Maryland alone began to exceed 10,000,000 bushels a year, with a value of $4,000,000 and upwards.[4]

When the first complete survey of the oyster industry was made, in 1880, Maryland, Virginia, New Jersey, New York, and Delaware ranked in the order named as regards the quantity of oysters obtained. Of a total of 22,195,000 bushels of oysters taken in the United States, 20,700,000 bushels came from the Middle Atlantic States, Maryland producing 10,600,000 and Virginia 6,800,000 bushels.[5] The oyster

---

[1] Ingersoll, *The Oyster Industry*, (U. S. Census, 1880), 167.
[2] Stevenson, *The Oyster Industry of Maryland* (Bul. U. S. Fish Commission, 1892), 267.
[3] Ingersoll, *Ibid.*, 167 (note). [4] Stevenson, *Ibid.*, 212. [5] Ingersoll, *Ibid.*, 251.

fishery was at that time, and has been ever since, the most valuable fishery of the United States. Its development had made the Middle Atlantic States a close rival of the New England States in the importance of fisheries, and the maintenance and continued growth of the oyster business after 1880 enabled the Middle Atlantic States eventually to assume first place, usurping the position which New England held for more than two centuries.

Since 1880 the oyster fishery has fluctuated from year to year, according to the favorable or unfavorable character of the season and the conditions of the oyster-beds. On the whole, the quantity of oysters marketed has gradually increased, and with a rise of prices the value of the product has increased at a greater rate than the quantity. The Chesapeake Bay fishery has continued to hold first place, the combined annual output of Virginia and Maryland exceeding that of any other single region. From 1875 to 1890 Maryland possessed the greatest oyster industry in the world, and Baltimore was the center of the largest oyster trade ever developed at any one place. During the following decade Maryland gradually declined in relative importance, and since 1900 the quantity of oysters taken from Virginia waters has usually equaled or exceeded the Maryland output, and the oyster product both of New York and of Virginia has exceeded the value of the product of Maryland. In 1912 the Virginia product was greater than that of Maryland by 750,000 bushels.[1]

The oyster-canning industry reached its maximum development about 1885, and since then, because of the decrease of the supply of Maryland oysters and because of the growing demand for the fresh product, the canning business of Baltimore and surrounding points has gradually declined. Maryland no longer holds first place in this industry, being surpassed in 1908 by Mississippi, Louisiana, and South Carolina.[2]

The most notable features of the oyster industry in recent years have been the rapid advance of oyster planting or culture and the decrease in the quantity of oysters taken from public beds. Even in colonial days the excessive fishing of oyster-beds made necessary the enactment of laws intended to check the undue depletion of the natural supply of oysters. As the oyster fishery developed in importance during the nineteenth century, it became apparent that restrictive legislation would not prevent the ultimate destruction of the public beds, and that unless other steps were taken the supply of oysters would be exhausted. The perpetuation of the oyster industry was made possible only by the introduction of oyster-culture on a large scale. Oyster-culture is said to have originated in the thrifty custom of employing leisure hours to bring in supplies of oysters from outer beds and deposit them near shore, where they would be easily accessible when wanted. The practice began on Cape Cod before 1800, as a regular part of the preparation

[1] *Report of U. S. Commissioner of Fisheries, 1913*, p. 41.
[2] U. S. Census Report, *Fisheries of the United States, 1908*, p. 285.

of oysters for market. Oysters thus moved generally improved in size and quality after lying a few months on new ground, because in moving them they were broken apart from the original clusters and thus secured more room. When native resources of oysters became somewhat depleted, it was but a step farther to send vessels to purchase seed oysters from other localities. With the gradual diminution of the native oyster-beds of New York and New Jersey the practice of planting oysters from the Chesapeake region steadily increased, and it soon became a regularly established part of the oyster industry. As private oyster-beds grew in number and area the sale of seed oysters became an important part of the oyster trade, and a large portion of the annual product now consists of seed oysters.

Table 74 indicates how the oyster product of 1908 was utilized.

TABLE 74.—*Quantity and value of market and seed oysters, 1908.*[1]

Kinds and area.	Quantity.	Percentage of distribution.	Value.	Percentage of distribution.
Market oysters:	*bushels.*			
From public areas....	14,806,000	44	$4,416,000	28
From private areas...	10,665,000	32	8,305,000	53
Total......	25,471,000	76	12,721,000	81
Seed oysters:				
From public areas....	3,851,000	12	1,035,000	7
From private areas...	4,008,000	12	1,957,000	12
Total......	7,859,000	24	2,992,000	19
Grand total......	33,330,000	100	15,713,000	100

[1]Census report, *Fisheries of the United States, 1908*, p. 67.

Since oyster-planting is carried on almost altogether as a private venture, it can be successful only in those States where private individuals are able to secure a legal title to the oyster-beds which they maintain. In nearly all the States having oyster fisheries it has been made possible for oyster-planters either to lease or to purchase outright from the State a limited area of sea-bottom suitable for oyster-culture. Maryland is the only important oyster State on the Atlantic coast which has failed to protect adequately the operations of the oyster-planters, and consequently oyster-culture has made but little headway there, a condition that is in a large measure responsible for the diminution during recent years of the output of Maryland oysters. In New York, New Jersey, Georgia, Rhode Island, Connecticut, Massachusetts, and the Pacific Coast States the majority of oysters are now taken from private areas, while in Maryland, North Carolina, South Carolina, Florida, and the Gulf States the oysters are taken mostly from public beds. The total product of market oysters from public beds in 1908 was more than a third larger than that from private beds,

but the value of the latter was almost double that of the former. Of seed oysters the quantity taken from private beds was the larger and more valuable.

In the South Atlantic and Gulf States the oyster industry commenced much later than in the New York, New Jersey, and the Chesapeake districts, but its rapid development in recent years, especially in the Gulf district, indicates that if progress continues it will, before many years, rival the longer established industries of the Northern States. In 1880 the oyster product of the South Atlantic States amounted to only 310,000 bushels, and that of the Gulf States to only 579,000 bushels.[1] In 1908 the product of the two divisions was, respectively, 4,364,000 and 6,343,000 bushels. Louisiana, with 3,650,000 bushels in 1908, ranked fourth among the States as regards the amount of output. South Carolina, Georgia, Mississippi, and Florida each contributed more than 1,000,000 bushels, and Alabama and Texas about 500,000 bushels each.[1] Oyster-canning was started in several of the Southern States about 1880, and the industry has been steadily maintained. In 1908 Louisiana, Mississippi, and South Carolina were the three leading States as regards the quantity of oysters canned, and Georgia, Florida, and North Carolina each had a canning industry of some value.[2] As yet the larger part of the oysters on the Gulf coast is taken from public areas, but oyster-culture has been encouraged and protected, and is steadily increasing. In 1911, out of a total product of 6,226,141 bushels of oysters taken in the Gulf States, 2,080,005 bushels came from private grounds. In the South Atlantic States in 1910 only 456,194 bushels were taken from private grounds, as against 1,244,804 bushels from public areas.[3]

Of other shellfish taken on the Atlantic and Gulf coasts the most important are the clams and crabs, found most abundantly in the Middle Atlantic States, and shrimp and prawn, which come chiefly from Louisiana and Mississippi.

The clam industry in 1908 ranked sixth in value among the fisheries of the United States, the total product amounting in value to $1,917,000. Of this amount the Middle Atlantic States contributed $1,024,000 and New England most of the remainder.[4] Both hard and soft clams are taken in the Middle Atlantic States, though the quantity of soft clams is but small, this species not appearing south of New Jersey. The hard clam or quahog fishery extends all along the coast from Maine to Florida. The leading State in 1908, with respect to value of product, was Virginia, with New York and New Jersey ranking in order. As early as 1855 extensive quahog fisheries were carried on along the shore of New Jersey and Long Island, and they have

---

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 68. [2] *Ibid.*, 285.
[3] *Report of U. S. Commissioner of Fisheries, 1913*, p. 41.
[4] U. S. Census Report, *Fisheries of the United States, 1908*, p. 52.

continued to hold an important place among the fisheries of these localities, though the decreased production in recent years indicates that the supply of clams is gradually diminishing. Prior to 1890, the Virginia quahog fishery was relatively unimportant, but it has since attained considerable value. Since 1895 there has been some progress made in the cultivation of quahogs and a portion of the product is now taken from private grounds. The growing scarcity of the quahogs on public grounds and the increasing demand for them will probably result in extensive developments in their cultivation.

The total value of the hard and soft crabs taken in the United States in 1908 amounted to $912,000.[1] The chief center of the crab fishery was the Chesapeake Bay district, Maryland and Virginia dividing almost equally between them over two-thirds of the total product. The crab industry was but slightly developed before 1875. In 1880 the New Jersey crab product, valued at $163,000, amounted to one-half of the total.[1] By 1890 the Maryland industry had outstripped that of all other localities. In both Maryland and Virginia the hard crab is the basis of an important canning industry; the soft crabs are shipped, packed in ice and seaweed, to the large cities along the Atlantic coast. Crisfield (Maryland), at one time an important center of the oyster trade, is the most important crab-shipping point in the United States, receiving most of the catch from Maryland and a large part of the Virginia product.

Most of the shrimp and prawn come from the warm waters of the Southern States. The most important shrimp fishery is in Louisiana, the product of that State in 1908 amounting in value to $213,000.[2] Practically the entire catch of prawn comes from the Atlantic coast of Florida. The shrimp and prawn fishery has been in existence for more than three-quarters of a century, but its period of greatest development, especially in the Gulf region, has been since 1885. The largest part of the catch is consumed fresh in southern cities, but a portion is canned and a small amount dried.

THE SHAD FISHERY.

The fishery for shad in the rivers of the Atlantic coast is one of the oldest and most valuable of the fishing industries of the United States. During colonial times shad ascended practically all the streams of the eastern coast from Florida to the St. Lawrence, and the people living along the rivers gladly availed themselves of the opportunity to add to their food-supply from the annual run of fish, though, like many other important fisheries, the shad fishery for a long time failed to acquire a commercial standing. It is uncertain just when the first commercial shad fisheries were prosecuted, but as early as 1736 shad from the Connecticut River were advertised for sale in Boston.[3]

[1]U. S. Census Report, *Fisheries of the United States, 1908*, p. 55. [2]*Ibid.*, 72.
[3]Goode, *Fisheries and Fishery Industries of the United States*, sec. v, I, 660.

During the eighteenth century shad were caught all along the river courses many miles from the coast, the run of fish being blocked by natural obstructions in but few streams. Falls existed in practically all the rivers, but the only ones known to have been insurmountable for shad were Weldon Falls on the Roanoke, 249 miles from the mouth; Great Falls on the Potomac, a few miles above Washington; and Bellows Falls on the Connecticut, 204 miles from the ocean. While no shad fisheries were ever prosecuted above these falls, in other streams the shad-run extended far upstream—in the Susquehanna to Binghamton (New York), 513 miles by river, and in the Peedee, 451 miles to Wilkesboro. At present the longest run is in the St. John's River, Florida, where the run extends to the sources, some 375 miles above the mouth of the river.

In very few streams north of the St. John's River is it now possible for shad to ascend to the upper courses. Nearly all the important rivers have been rendered impassable by the erection of dams, and in dozens of streams the old spawning-grounds of the shad have been destroyed as a result of the pollution of the water by sewage and refuse from manufacturing establishments. An even more important factor in reducing the range of the shad has been the organization of extensive fisheries near the coast. Previous to the early part of the nineteenth century, while the consumption of shad was largely local, most of the fish taken were caught in the middle and upper sections of the rivers, but as the market grew and the profits to be derived from shipping the shad to distant points increased, large commercial fisheries grew up near the mouths of the streams, where the chances for large catches were greater and where better transportation facilities were available. Since 1895 the most important shad fisheries have been in the lower courses of the rivers, and by far the largest proportion of the annual catch is now taken from the salt water of the bays and estuaries near the coast.

The steady increase of the shad fishery during the nineteenth century and the gradual concentration of the fishing operations near the mouths of the rivers (where the fish could be intercepted and taken before having a chance to reach a spawning-ground) eventually so reduced the quantity of shad that it became apparent that the total extinction of the fishery would quickly occur, if natural reproduction alone were depended on to maintain the supply. As early as 1867 steps were taken to replenish and maintain the shad fishery by means of artificial propagation. Experiments in shad hatching were first made in Massachusetts, and their successful outcome induced the authorities of Rhode Island, Connecticut, and New York to begin the practice. The fish hatcheries of the Federal Government have engaged extensively in the propagation of this valuable species. Hatching operations are now carried on along almost all large streams, the eggs being

secured from the fish caught for market. Previous to 1880 artificial propagation had but little effect. In that year the total catch of shad on the Atlantic coast amounted to only 18,000,000 pounds, a smaller quantity than had been taken for several years. Thereafter, however, the fishery began to show the effects of national and State activity in fish-hatching, and for a number of years the annual yield steadily increased, the catch of 1890 amounting to over 50,000,000 pounds, but during recent years another decline has set in. The adverse conditions which caused the decline prior to 1880 have continued, until natural reproduction has ceased to be of great importance, while artificial propagation has been seriously hampered by the inability to secure a sufficient quantity of eggs for many of the State and Federal hatcheries, due to the growing demand for and consumption of shad roe.

TABLE 75.—*Quantity and value of the shad fisheries in 1908.*[1]

State.	Quantity.	Percentage of distribution.	Value.	Percentage of distribution.
	pounds.			
Virginia	7,314,000	26	$486,000	23
North Carolina	3,942,000	14	373,000	18
Florida	2,836,000	10	320,000	15
Maryland	3,937,000	14	247,000	12
New Jersey	3,004,000	11	229,000	11
Georgia	1,333,000	5	190,000	9
Delaware	870,000	3	68,000	3
Maine	770,000	3	42,000	2
South Carolina	464,000	2	41,000	2
Pennsylvania	593,000	2	38,000	2
New York	360,000	1	27,000	1
Connecticut	122,000	..	18,000	1
California	1,169,000	4	12,000	1
Massachusetts	389,000	1	12,000	1
Oregon	431,000	2	8,000	..
Washington	100,000	..	1,900	..
Rhode Island	4,500	..	400	..
United States	27,641,000	100	2,113,000	100

[1]From U. S. Census Report, *Fisheries of the United States, 1908*, p. 71.

Notwithstanding the decline following 1896, the shad in 1908 ranked fourth in value among the fishery products of the United States, and second among the products of the Atlantic coast fisheries, excluding those of New England. The total catch, amounting to 27,641,000 pounds, was valued at $2,113,000. Of this quantity 58 per cent was taken in the Middle Atlantic States, 40 per cent from the Chesapeake Bay district, and 16 per cent from the Delaware Bay region. The South Atlantic States contributed 31 per cent of the total catch.

The shad fishery of the Chesapeake Bay district is the most extensive. Formerly the shad were taken in the large rivers entering the bay, the Susquehanna, the Potomac, and the James. The Potomac

and the James River fisheries were of importance and value in colonial days, pickled shad not only constituting an important part of the food-supply of the plantations along the banks of the streams, but also forming a small factor in the domestic and foreign trade of Virginia. The Susquehanna fishery, extending through Pennsylvania and into New York, was famous throughout the country, and people living many miles from the river came every spring to secure a supply of shad, either by catching them or by trading the products of their farms to the fishermen who lived along the river. At present the multiplicity of fishing operations near the mouths of these streams and in the bay itself has reduced the fisheries in the fresh waters of the rivers to insignificance. Under present conditions the shad fishery of this district is surely approaching extermination. The Commissioner of Fisheries says in his report for 1913 (page 65):

"Fish entering Chesapeake Bay have to run through such a maze of nets that the wonder is that any are able to reach the spawning-grounds to deposit their eggs. The mouth of every important shad and herring stream in the Chesapeake Basin is literally clogged with nets. . . ."

The shad fishery of the Delaware River district was for many years the most famous on the coast, and the catch in the river itself is larger now than that of any other river, but it is gradually diminishing. The catch of 1910 was only one-third as large as that of 1896, but its value was much greater because of the increase in the price of the fish.[1] In the early days of the nineteenth century the Hudson River shad fishery was one of the largest river fisheries of the country, but overfishing, pollution, and the erection of dams have reduced it to a low rank. The shad fishery of North Carolina, which for several decades has been the most valuable fishery of that State, is one of the oldest fisheries of the South Atlantic district. In 1902 North Carolina ranked first among the States in the quantity of shad taken, but by 1908 Virginia had taken the lead. In recent years the North Carolina fishery has improved, the catch in 1910 (which was only slightly less than that of Virginia) being larger than any other catch since 1902.[2] The St. John's River in Florida, in which the shad fishery has been developed since the Civil War, is now one of the leading shad streams of the country. In both South Carolina and Georgia the shad is among the most valuable fishery products.

OTHER FISHERIES.

Two other anadromous fish of the Atlantic coast are the alewife and the sturgeon. The sturgeon fishery of the United States has had a brief and tragic history. At one time the sturgeon was found in great abundance along the entire Atlantic coast from New England to Georgia and was also plentiful on the Pacific coast and in the Great Lakes and

[1] *Report of U. S. Commissioner of Fisheries, 1911*, p. 36. [2] *Ibid.*, 37.

other inland waters. Like many other fishery products which later came to have large commercial value, the sturgeon were once looked upon in many localities as utterly worthless, and often, when they became entangled in fishermen's nets, they were wantonly killed and thrown back into the water. Few commercial sturgeon fisheries were established either along the Atlantic coast or elsewhere in the United States before 1870, and even in the fisheries existing at that time the sturgeon roe, which is now of great value, was often discarded as worthless. Processes of preparing the roe for caviar were soon perfected, however, and by 1880 the sturgeon fishery was well developed. The great demand for caviar in Europe stimulated the fishery and the sturgeon soon rose from a position of worthlessness to one of extremely high value. Caviar mounted in price from about $10 a keg in 1885 to $40 a keg in 1894.[1] This rapid increase in price gave the sturgeon fishery prominence, but reckless fishing soon brought about a rapid decline. The fishery reached the climax of its prosperity about 1890, when the annual catch was from 12,000,000 to 15,000,000 pounds a year. After that year it gradually decreased until the annual product is now less than 1,000,000 pounds a year. With the decrease in the supply the price has risen to an extraordinary figure, a mature female sturgeon easily bringing $150 at the present time, and very few fish selling for less than $30 each.[2] Along the Atlantic coast the sturgeon catch fell from 6,000,000 pounds in 1890 to 649,000 pounds in 1908.[3] In some rivers which once supported a valuable fishery the sturgeon is entirely exterminated, and in all sections the catch has steadily diminished. Because of the peculiarity of the spawning habits of the sturgeon attempts at artificial propagation have entirely failed, and the fact that the roe is the most valuable part of the fish has impeded the efforts to provide for the perpetuation of the fishery through natural propagation. Under present conditions the sturgeon fishery as a commercial enterprise will soon disappear, and the fish itself will probably be practically extinct within a few years.[4]

The alewife, also called "herring" in many localities, has long been one of the most abundant of the food fishes taken along the Atlantic coast. It is caught in all the Atlantic States north of the Neuse River, but by far the largest part of the catch is taken in Virginia, Maryland, and North Carolina. Unlike the shad, the alewife seems so far to be unaffected by the erection of dams and the contamination of rivers, and with but little aid through artificial propagation, the alewife fishery has grown steadily for a number of years. The quantity taken in 1908, amounting to 89,978,000 pounds, was larger than the catch recorded in any previous year.[5] The early settlers found the alewife a

[1] *Report of U. S. Commissioner of Fish and Fisheries, 1899*, p. 379.
[2] *Report of U. S. Commissioner of Fisheries, 1913*, p. 67.
[3] U. S. Census Report, *Fisheries of the United States, 1908*, p. 76.
[4] Tower, "The Passing of the Sturgeon" in *Popular Science Monthly*, Oct. 1908, pp. 361–371.
[5] U. S. Census Report, *Fisheries of the United States, 1908*, p. 47.

ready source of food-supply, and they also used it often to fertilize their cornfields. As a commercial enterprise, the alewife fishery was of little importance before 1850. Since 1880 the annual value of the alewives taken has been about $500,000. Of the alewife product of 1908 about three-fourths was sold fresh and the remainder cured by salting or smoking.

Of the food-fish taken from the ocean along the Atlantic and Gulf coasts the most important are the squeteague, mullet, snapper, bluefish, Spanish mackerel, and flounder. All of these species are found along the entire coast from New York to Texas, though not in uniform abundance. The squeteague and bluefish are most plentiful along the New Jersey coast and the snappers and mullet along the South Atlantic and Gulf coasts. The flounders are found in greatest abundance along New England, though a considerable quantity is caught south of Long Island. Almost the entire catch of Spanish mackerel now comes from Florida, though two score of years ago the Chesapeake Bay region led in the production of this species. The taking of practically all these fish for market began only a few years before the Civil War. The production of each species has in general advanced constantly, though the quantity taken fluctuates from year to year according to the character of the season.

The squeteague product in 1908, which was the largest recorded to that time, amounted to 49,869,000 pounds, valued at $1,776,000.[1] About half of the entire quantity was taken by the fishermen of New York and New Jersey from the fishing-grounds along the New Jersey shore and in Delaware Bay. North Carolina, Florida, and Virginia each contributed about 4,500,000 pounds, and from every other State on the Atlantic and Gulf coasts, except Maine and New Hampshire, a squeteague product of more or less value was reported. The catch of bluefish in 1908, amounting to 7,647,000 pounds, valued at $506,000,[2] was the smallest on record both as regards quantity and value. Two-thirds of the catch was contributed by New York and New Jersey and a little more than one-fourth by North Carolina and Florida. The largest bluefish catch ever recorded was that of 1897–98, which amounted to 22,461,000 pounds.

The leading mullet-producing State in 1908 was Florida, which was credited with 73 per cent of the total catch of 33,703,000 pounds, the value of which was $908,000. The quantity of mullet taken was somewhat less than the catch of 1904, though it was of greater value.[3] Over nine-tenths of the snappers caught in 1908 consisted of the red-snapper product of Florida, Alabama, and Texas. The chief fishing-grounds for this species is along the west coast of Florida, and that State was credited with more than one-half of the total snapper product, which was 13,854,000 pounds.[1] Florida also led in the production of Spanish

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 74. [2] *Ibid.*, 48. [3] *Ibid.*, 64.

mackerel, having approximately three-fourths of the 3,806,000 pounds taken in the United States. New York was the only State south of New England possessing a valuable flounder fishery. Of the total product of 23,346,000 pounds, New York was credited with one-fifth.[1]

Two other fisheries of the Atlantic and Gulf coasts of sufficient importance to deserve notice are the menhaden fishery and the Florida sponge fishery. The menhaden fishery is one of the most interesting of all American fisheries. The menhaden, though possessing small value as a food-fish, has furnished the basis of a great industry employing thousands of men at sea and ashore, and it has for a number of years ranked first among the fishery products of the United States from the standpoint of quantity taken. It is by far the most abundant and prolific fish found along the Atlantic coast. It is a migratory species, appearing each year, with the advent of warm weather, along the coast from Maine to Texas, its favorite grounds being from Cape Cod to Cape Henry. The menhaden follow the shallow shore-waters closely, moving into the bays and brackish waters of the rivers. Most of the annual catch is taken within 2 miles of the shore.

Several attempts have beem made to bring about the extensive use of menhaden as food in one form or another, but they have met with little success, and the usefulness of the species has been, for the most part, limited to their utilization as bait, as fertilizer, and as a source of oil. Beginning about 1835, and for a number of years thereafter, "slivered menhaden" was the chief bait used by the mackerel fishermen, and it was also used extensively by the halibut and cod fleets. When the hook and line were superseded by the purse-seine in the mackerel fishery, the demand for menhaden as bait was greatly reduced, and though it still forms the principal source of bait for the line fisheries of New England and the Middle Atlantic States, its chief use for several decades has been in the oil and fertilizer factories.

The menhaden oil and fertilizer industry originated in New England during the first half of the nineteenth century. A brief description of the industry has already been given. Small oil industries were established at the eastern extremity of Long Island soon after the process of manufacture was discovered, and in 1850 a large factory, with a capacity for 2,000,000 or 3,000,000 fish annually, was put up at Shelter Island, New York.[2] During the sixties several oil and fertilizer factories were put up south of New York, a mill being erected on the Delaware Bay in 1861, one on the Chesapeake in 1866, and another in New Jersey in 1868.[3] The business proved to be very profitable, and as the menhaden were abundant and easily captured in large quantities the fishery quickly assumed large proportions. Improvements in

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 56.
[2] *Report of U. S. Commissioner of Fish and Fisheries, 1902*, p. 256.
[3] Goode, *Fisheries and Fishery Industries of the United States*, sec. ii, 398, 463; sec. v, vol. I, p. 369.

the process of manufacture quickened the industry and larger factories, capable of using 3,000 to 5,000 barrels of fish a day, were erected at several points along the coast between New York and North Carolina. For a number of years many small "kettle factories" were successfully operated, but they were at a disadvantage as compared with the large mills with their cheaper methods of large-scale production, and most of the small plants gradually dropped out of existence toward the close of the century.

During the twenty years following 1870 the menhaden fishery expanded most rapidly and reached the climax of its development. In 1880 the most important center of the menhaden industry was in the region known as the "Promised Land," near the eastern end of Long Island, where several large factories were operated.[1] The product of the Long Island mills in that year, valued at $1,114,158, represented over half of the total value of the menhaden product.[2] Besides the Long Island industry, the only other important menhaden industries in 1880, outside of New England, were in Virginia and New Jersey. During the ten years following 1880, the menhaden industry was extremely prosperous, reaching the point of greatest importance in 1884, when the products rose to a value of $2,800,000.[3] Both the oil and the scrap sold at high prices and the factory owners realized large profits. Since 1884 the competition of other oils and fertilizers has cut down the profits of the menhaden industry, and though it still stands as one of the valuable industries based on the fisheries, it is neither so prosperous nor so profitable as during the decade following 1880. The industry was gradually shifted, and at present centers around the Virginia coast, where the best menhaden fisheries are to be found. In 1908 the total quantity of menhaden taken was 394,776,000 pounds, valued at $893,000.[4] The value of the oil and fertilizer manufactured from menhaden was probably about $2,000,000. Virginia was credited with almost one-half of the total catch of menhaden, and Delaware and North Carolina with 15 per cent each.

Some years ago there was a concerted effort made to restrict the operations of the menhaden fishermen on the ground that large quantities of food-fish were taken in the seines with the menhaden and subsequently manufactured into oil and fertilizer. In 1894 the United States Fish Commission made an exhaustive investigation of the matter and found that only about 0.33 per cent of the catch of fish in the menhaden seine was food-fish, and of this quantity only a very small proportion consisted of choice and popular species. In fact, it was demonstrated that not enough desirable food-fish were taken to supply the crews of the menhaden vessels. The results of the investigation

[1] Goode, *Fisheries and Fishery Industries of the United States*, sec. ii, 351, 353, 368.
[2] *Ibid.*, sec. v, vol. I, 361.
[3] *Report of U. S. Commissioner of Fish and Fisheries, 1902*, p. 257.
[4] U. S. Census Report, *Fisheries of the United States, 1908*, p. 63.

effectually put an end to all complaints that the menhaden industry was a source of danger to other fisheries.[1]

The only sponge fishery of the United States is carried on from the west coast of Florida, Key West and Tarpon Springs being the most important centers. The sponge fishery dates from about 1850.[2] Previous to that year practically all the sponges used in the United States came from the Mediterranean grounds or from the Bahama Islands. As European sponges became more costly the Florida reefs were turned to as a source of supply. The industry developed slowly at first, but by 1880 the quantity taken amounted to 207,000 pounds, valued at $201,000.[3] From 1880 to 1900 there was a steady increase in the output, the product for the latter year being valued at $568,000. For a few years after 1900 the fishery declined somewhat, but the quantity taken in 1908, amounting to 622,000 pounds, was larger than the product of any previous year, though not quite as great in value as the product of 1900. For a number of years, while there was a sufficient supply of sponges to be found in shallow water, it was customary to gather them with hooks attached to long poles, but when the shallow beds became depleted and it was necessary to extend operations to deeper waters, the poles could not be used effectively. As a result of this difficulty Greek divers were brought over from the Mediterranean fisheries in 1884,[4] but it was found that the diving apparatus destroyed the growth of young sponges, and the Florida legislature enacted a law forbidding the taking of sponges by diving. Toward the end of the century, however, the divers were again introduced to exploit the fisheries lying beyond the three-mile limit. In 1906 Congress enacted a measure to prevent the sale within the United States of sponges taken by diving, but the law has proved unenforceable. At present over one-half of the product is taken by diving apparatus. The fear of the depletion of the fisheries has led to some efforts at cultivation, but so far they have produced only insignificant results.

[1] McFarland, *History of the New England Fisheries*, 229.
[2] Goode, *Fisheries and Fishery Industries of the United States*, sec. v, vol. II, p. 830.
[3] U. S. Census Report, *Fisheries of the United States, 1908*, p. 104.
[4] *Report of U. S. Commissioner of Fish and Fisheries, 1896*, p. 301.

CHAPTER XXXIV.

THE FISHERIES OF THE GREAT LAKES AND THE MISSISSIPPI RIVER SYSTEM.

Growth of the Great Lakes fisheries, 1880 to 1908, 202. Statistics of the fisheries of the Great Lakes in 1908, 203. Varieties of lake fish, 203. Location of the early Great Lakes fisheries, 204. Fisheries of the Great Lakes after 1870, 205. The culture of fish for the Great Lakes, 206. Fisheries of the Mississippi River and its tributaries, 207. The mussel fishery and the manufacture of pearl buttons, 209. Other river fisheries, 210.

The fisheries of the Great Lakes carried on by the people of the United States and Canada are the most extensive lake fisheries in the world. Though the lake fisheries of the United States have never been of great importance in comparison with those of some of the coastal sections, they nevertheless have been for a long time a valuable source of food-supply for several States and have been no inconsiderable factor in the fisheries of the country as a whole. Established soon after the beginning of the nineteenth century, the commercial fisheries of the lakes gradually increased in extent and value for many years, reaching a maximum quantity of output about 1890. Though the amount of fish caught has declined somewhat since that year, the value of the annual product has risen, the capital invested has increased, and the number of persons employed has changed but little. In recent years even the amount of fish taken has risen slightly in quantity, the catch of 1908 being but little smaller than that of 1890, which was the largest ever recorded.

The catch of fish on the Great Lakes and tributary streams during certain years from 1880 to 1908 and the value of the catch were as follows:

TABLE 76.—*Amount and value of Great Lakes fisheries, selected years, 1880 to 1908.*[1]

	1880	1885	1890	1893	1899	1903	1908
Amount (lbs)	68,742,000	99,842,000	113,898,531	96,619,671	113,727,240	86,194,817	106,632,000
Value	$1,652,000	$2,691,966	$2,471,768	$2,270,618	$2,611,439	$2,745,501	$3,767,000

[1]The statistics are from the *Report of the Commissioner of Fisheries, 1904*, p. 651, and the Census Report, *Fisheries of the United States, 1908*, p. 11.

Though fisheries have been developed on all the lakes, those of Lake Erie and Michigan have always greatly exceeded those of the other lakes in extent and value. In all the years in which statistics of the fishing industries of the Great Lakes have been collected, the products taken from the waters of these two lakes have made up from two-thirds to three-fourths of the value of the total. The fisheries of Lake Erie, being the first to be developed on an extensive scale,

for a long time occupied first place, but for the last few decades the Lake Michigan fisheries have been of almost equal importance with those of Lake Erie, sometimes ranking a close second and often holding first place as regards value of product. The condition of the fisheries of the various lakes in 1908 is shown in table 77:[1]

TABLE 77.—*The fisheries of the Great Lakes in 1908.*

	Total.	Lake Superior.	Percentage of total.	Lake Michigan.	Percentage of total.	Lake Huron.	Percentage of total.
Number of persons employed	8,533	786	9	2,706	32	1,382	16
Capital	$4,814,000	$391,000	8	$1,965,000	41	$733,000	15
Vessels and boats, including outfit	1,651,000	149,000	9	692,000	42	185,000	11
Apparatus of capture	1,831,000	159,000	9	753,000	41	281,000	15
Shore and accessory properties and cash	1,332,000	83,000	6	519,000	39	267,000	20
Value of products	3,767,000	342,000	9	1,554,000	41	486,000	13

	Lake St. Clair and St. Clair and Detroit rivers.	Percentage of total.	Lake Erie.	Percentage of total.	Lake Ontario including Niagara and St. Lawrence rivers.	Percentage of total.
Number of persons employed	221	3	3,142	37	296	3
Capital	$46,000	1	$1,644,000	34	$35,000	1
Vessels and boats, including outfit	10,000	1	603,000	37	11,000	1
Apparatus of capture	8,000	..	615,000	34	16,000	1
Shore and accessory properties and cash	28,000	2	426,000	32	7,900	1
Value of products	32,000	1	1,280,000	34	74,000	2

Over two score varieties of food-fish inhabit the waters of the Great Lakes. Considering the Great Lakes as a whole, the most abundant and most valuable species of fish taken at the present time are, in order, lake herring or ciscoes, lake trout, pike perch, whitefish, yellow perch, German carp, suckers, pike and pickerel. In 1908 these were the only varieties the value of the catch of which amounted in each case to more than $100,000.[2] The value of the catch of all eight of these species constituted more than nine-tenths of the value of the entire product of the lake fisheries, and the value of the catch of the first four—lake herring, lake trout, pike perch, and whitefish—made up about three-fourths of the total. Formerly the whitefish were caught in greater abundance than was any other species, and sturgeon occupied a high rank among the products of the lakes; but the catch of whitefish has in recent years been comparatively small, and the sturgeon have fallen to a position of relative unimportance.

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 12. [2] *Ibid.*, 26.

Though the leading varieties of fish are to be found in all of the lakes, they do not by any means occur in all of them in the same abundance. The deeper waters of Lakes Michigan, Superior, and Huron are the favorite abode of the lake trout, over one-half of the product of that species in 1908 coming from Lake Michigan alone. Lake Michigan also leads at present in the production of herring and whitefish, though for a long time the former species was taken in greatest quantities from the shallower waters of Lake Erie. Lake Erie still leads in the production of perches, carp, pike, and pickerel, and the whitefish, too, have been plentiful in this lake. In 1908 either Lake Erie or Lake Michigan was first in the production of the eight leading varieties except suckers, of which the largest catch was taken from Lake Huron.

TABLE 78.—*Value of the catch of the leading species of lake fish in 1908.*[1]

	Value.		Value.
Lake herring	$988,000	Yellow perch	$208,000
Lake trout	800,000	Carp	195,000
Pike perch	569,000	Suckers	167,000
Whitefish	525,000	Pike and pickerel	136,000

[1]U. S. Census Report, *Fisheries of the United States, 1908*, p. 26.

Just when and where commercial fishing was first prosecuted on the Great Lakes is not known, but it was apparently begun shortly after 1800 in two localities—in the vicinity of Detroit, and at the upper end of Lake Huron in the neighborhood of the Straits of Mackinac and Sault Ste. Marie.[1] Prior to 1800 the lake shores were inhabited by white men in comparatively few places, and though the early settlers at such points as Detroit, Green Bay, Cleveland, Erie, and Buffalo engaged in fishing, their operations were confined entirely to securing a supply of fish for their own consumption. With the increase in the number of settlements on the shores of the lakes and the gradual growth of population, commercial fishing on a small scale soon became possible, and before 1825 several small villages on Lake Erie and Lake Huron had an established fish trade. Small quantities of salted fish were shipped regularly from Mackinac and Detroit to Cleveland and Buffalo during the greater part of the first quarter of the nineteenth century.[2]

After the opening of the Erie Canal a great wave of migration swept into the territory around the lakes. With the rapid settlement of the region west of the State of New York, there was a great increase in the demand for lake fish and a very rapid expansion of the lake fisheries. During the quarter of a century following 1830 fishing operations were begun along almost every part of the United States shore of the Great Lakes except Lake Superior. The construction of the Ohio and Miami canals opened the way for distributing the fish southward, and within a few years after their completion salted fish from lake ports were sold

[1]*Report of U. S. Commissioner of Fish and Fisheries, 1887*, p. 230. [2]*Ibid.*, 211, 267.

all along the Ohio River and even in the cities along the Mississippi River. About 1845 the practice of shipping fresh fish packed in ice was begun at Cleveland, Mackinac, and other places, and in a short time a fresh-fish trade was established that rivaled the trade in salt fish.[1] The construction of railways in the States about the Great Lakes stimulated the fish trade and the fishing industries. The introduction of freezing-houses in the sixties facilitated the handling of the lake products, and the general use of the most advanced types of fishing apparatus enabled the fisheries quickly to reach a high stage of development.[2] By 1870 the lake fisheries had practically completed their course of evolution and had attained the form which they possess at present. The pound-net was in use at all important fishing centers, the steam-tug was beginning to be employed in the gill-net industry, and the trade in fresh fish was of considerably more value than the salt-fish trade. The fisheries of Lake Superior were well established by that year.

FISHERIES OF THE GREAT LAKES AFTER 1870.

The chief features of the history of the Great Lakes fisheries since 1870 have been the depletion of some of the leading species of lake fish, the recent decline of the lake fisheries as a whole, and the attempts of the Federal and State governments to replenish and maintain the supply of the best varieties of food-fish by means of artificial propagation and restrictive legislation.

Though fluctuating in extent from year to year, the fisheries of the Great Lakes have, on the whole, continued to increase in magnitude until within the past few years, but at the same time there has been since 1880 a distinct decrease in the supply of certain species of fish, the most notable decline being that of the whitefish and the sturgeon. Throughout all the early history of the lake fisheries the whitefish was more sought after and more highly prized than any other species, it being in fact for many years the only variety of any commercial value. As the fishing industries of the lakes developed, the trout of the upper lakes and several other varieties of fish, such as pike perch and yellow perch, sturgeon, herring, and suckers, were added to the list of valuable products, but as late as 1880 the whitefish stood far ahead of the others both in the quantity and value of the annual catch. In that year the amount of whitefish taken represented nearly one-third of the total product of all the lake fisheries, but never since has it occupied such an important position. From 1880 to 1899 the annual yield declined from 21,464,000 pounds to 6,683,000 pounds.[3]

During the same time the catch of sturgeon, which stood third in importance among the lake fish in 1880, dropped from 7,557,000 pounds

[1] *Report of U. S. Commissioner of Fish and Fisheries, 1887*, pp. 211, 265. [2] *Ibid.*, 1872, p. 5.

[3] According to the U. S. Census Report, *Fisheries of the United States, 1908*, p. 78, the whitefish catch was 21,464,000 pounds in 1880; 15,326,000 pounds in 1889; 6,683,000 pounds in 1899; 7,520,000 pounds in 1903; 7,722,000 pounds in 1908.

to 1,082,000 pounds.[1] The sturgeon fishery, like that of the Atlantic coast, has continued to decline and is on the verge of extinction. The whitefish industry seems, however, to have reached its lowest ebb in 1899, and both times that statistics have been taken since that year the amount of whitefish taken has shown a slight increase.

The chief causes of the rapid decline of these fisheries were overfishing, destructive methods of fishing, and the pollution of waters and spawning grounds by sawmills. As in the river fisheries along the Atlantic coast, the fishing operations of the Great Lakes multiplied to such an extent that natural reproduction was insufficient to maintain the supply of fish. It was inevitable that the continued operations of large numbers of nets during the spawning season and over the spawning-grounds, where nets were often set in such profusion as practically to block the passage of the fish, would result in a great depletion of fishing resources. Furthermore, the use of pound-nets of small mesh permitted the capture of great quantities of small fish, which were often carelessly killed by the fishermen. Gill-nets also were responsible for the destruction of large numbers of whitefish during storms, when the nets could not be visited for several days at a time. Often, too, gill-nets would be lost through storms or freezing in the ice, carrying down with them hundreds of pounds of fish, which would decay and drive live fish from the spawning-grounds, thus causing still further loss. The pollution of water with sawmill refuse, especially in parts of the upper lakes where the great lumbering operations were carried on, whereby thousands of tons of sawdust and other refuse were turned into the waters, ruined large spawning areas and destroyed valuable fisheries in many localities.

The herring fishery of the Great Lakes had a period of almost constant growth from 1880 to 1890, the product rising from 15,968,000 pounds to 59,914,000 pounds, but it, too, has shown in recent years a tendency to decline, the catch in 1903 and in 1908 each being smaller than that of 1899.[2] The catch of 1908, amounting to 41,118,000 pounds, was, however, somewhat larger than that of 1903. Of lake trout, which next to the herring is the most valuable species now taken from the Great Lakes, the catch in 1903, amounting to 16,132,000 pounds, was the largest ever recorded. In 1908 the amount taken was 12,024,000 pounds. The pike-perch product has increased considerably in recent years, and this species will probably continue to advance in rank among the lake fish. Carp, which were introduced into the lakes only 25 years ago, are rapidly becoming one of the valuable fishery products.

For many years efforts have been made to preserve the stock of fish by resorting to artificial propagation and to restrictive laws. The

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 76. [2] *Ibid.*, 60.

fish commissions of some of the States bordering on the lakes and the Federal Bureau of Fisheries have conducted hatching operations on a large scale, and millions upon millions of eggs and young fish have been planted in the lakes in an effort to stay the decline. The whitefish, which long held the position of leading importance among the lake fish, has received the most attention in hatching operations, and it was also the first of the lake fish the artificial propagation of which was conducted on an extensive scale. Experiments in whitefish culture were made as early as 1858, but the first efforts of real importance were made in 1874, when the Michigan Fish Commission succeeded in hatching about 1,500,000 fry.[1] Wisconsin and Pennsylvania followed Michigan in fish-culture, and, in addition to whitefish, large quantities of herring, lake trout, pike perch, and yellow perch have been hatched and planted in the lakes. The United States Bureau of Fisheries has for a number of years operated six hatchery stations on the Great Lakes, two of which are in the State of Michigan, and at present the number of young fish and fertilized eggs distributed from these stations is over a billion a year, the chief species hatched being whitefish, yellow perch, pike perch, trout, and herring.[2] The activities of the State and Federal authorities in fish-culture have unquestionably prevented the exhaustion of the lake fisheries, and seem also to have checked the decline which set in near the close of the nineteenth century. To supplement the work of fish-culture the States along the Great Lakes have enacted laws providing for closed seasons and regulating the methods of fishing, but lack of concerted and uniform action by the several States has prevented the lake fisheries from receiving the full measure of benefit from the hatching operations and has made the most effective conservation work impossible. However, in recent years restrictive legislation has become more general.

FISHERIES OF THE MISSISSIPPI RIVER AND TRIBUTARIES.

The fisheries of the Mississippi River and its tributaries are, as regards the value of products, almost equal in extent to the fisheries of the Great Lakes, and though they show a much smaller investment of capital, they provide employment for a considerably larger number of persons.[3] No statistics of the fisheries of the Mississippi River were collected until about 1880, when the U. S. Fish Commission and the census department cooperated in an effort to secure detailed information concerning them, and of the material collected nothing was published except some general estimates, which indicated that the value of the annual product of the Mississippi River fisheries was at

[1] *Report of Michigan Fish Commission, 1884–1886*, Appendix, 98.

[2] *Report of U. S. Commissioner of Fisheries, 1913*, p. 6.

[3] On page 11 of the U. S. Census Report, regarding the fisheries of the Mississippi River division in 1908, the capital invested is given as $1,440,000, the number of persons employed as 11,731, and the value of products as $3,125,000.

that time about $1,400,000.[1] In 1894 the U. S. Fish Commission collected detailed information of all fisheries of the interior waters of the United States, which showed the value of the product of the fisheries of the Mississippi and its branches to be about $1,600,000.[2] In 1899 and in 1903 the U. S. Fish Commission made similar investigations, the result in both cases showing a steady progress of the fishing industries of this great river system. The report of the Bureau of the Census on the fisheries of the Mississippi River division in 1908 showed a continued progress, the product of the fisheries having attained a total value of $3,125,000, approximately twice the value of the catch a quarter of a century before.

Eighteen States share the commercial fisheries afforded by the waters of the Mississippi River system. Illinois holds by far the most important position, the river fisheries of that State in 1908 having a product valued at $1,378,000, or more than 40 per cent of the value of all the fishery products of the Mississippi River division.[3] Michigan is the only State not lying along the coast which has more valuable fisheries than Illinois. In each of nine other States in 1908 the products of the fisheries of the Mississippi and its tributaries amounted to more than $100,000. Table 79 shows the States which in 1908 had fishery products of a value of more than $100,000 from the Mississippi River and its tributaries.

TABLE 79.—*Fishery products of Mississippi Valley States, 1908.*[4]

State	Value	State	Value
Illinois	$1,378,000	Indiana	$182,000
Missouri	271,000	Louisiana	121,000
Iowa	215,000	Tennessee	112,000
Wisconsin	215,000	Kentucky	110,000
Arkansas	207,000	Minnesota	109,000

The most valuable fishery products of the Mississippi River district in 1908 were, in order, carp, mussels, buffalo-fish, catfish, fresh-water drum, and black bass. Of each of these varieties the product amounted in value to more than $100,000. Illinois led in the production of all except catfish, of which species Louisiana contributed the largest quantity.

Carp were introduced into the United States with a view to propagation in 1877, and from 1879 to 1896 they were systematically distributed throughout the country.[5] Originally they were placed only in private lakes and streams, but it was not long until public waters were stocked, either intentionally, as in certain streams of Illinois and

[1]Smith, *Statistics of Fisheries of the Interior Waters of the U. S.*, in Report, U. S. Commissioner of Fish and Fisheries, 1896, p. 490.
[2]*Ibid.*, 494. [3]U. S. Census Report, *Fisheries of the United States, 1908*, p. 118.
[4]Compiled from U. S. Census Report, *Fisheries of the United States, 1908.* [5]*Ibid.*, 49.

Indiana, or accidentally, through the overflowing of some private carp pond or stream. Being a hardy fish of great fecundity, the carp multiplied with astonishing rapidity, and by 1895 they were being handled by many fish-dealers in the Central States. The carp product of the entire country increased steadily from 2,108,000 pounds in 1894 to 42,763,000 pounds in 1908.[1] In the latter year it ranked tenth in value among the fishery products, the total value of the output being $1,135,000. Of this amount $858,000 was contributed by the fisheries of the Mississippi system—$571,000 by the river fisheries of Illinois alone.

The mussel fishery of the interior waters had its origin in the pearl-fishing operations of the Indians and early white settlers. Until 1891 mussels were taken only for the sake of the pearls which they might contain, and the mussel-shells, which are now the most valuable product of the fishery, were discarded. As long as the search for pearls was the sole object of the industry, the mussel fishery was of comparatively little importance, except at irregular intervals when a rich "find" would start a "craze" for pearl-hunting among the people living along the rivers where mussels were abundant. In 1891 a German mechanic built a factory at Muscatine, Iowa, for the purpose of making buttons out of mussel shells.[2] His venture proving successful, it was followed by the establishment of additional factories, and by 1899 there were in Iowa, Illinois, Missouri, and Wisconsin a total of 60 button factories, using annually about 12,000 tons of mussel-shells and turning out a product in buttons and button blanks valued at nearly a million dollars.[3] With the growth of this industry the mussel fishery developed to a position of prominence. In 1890 mussel-shells were not used at all for commercial purposes; in 1908 nearly 82,000,000 pounds of shells were gathered throughout the country, three-fourths of them coming from the rivers of Illinois, Indiana, and Arkansas.[4] The value of the shells taken from the Mississippi River and its tributaries was $386,000, and pearls and slugs of a value of $300,000 were found by the mussel fishermen. The expansion of button manufacturing has caused a heavy drain on this fishery and it has been almost exhausted in several localities where it was once flourishing. In Iowa the shell product dropped from 20,000,000 pounds in 1899 to 5,000,000 pounds in 1908,[5] and in Wisconsin during the same time there was a decline from 16,000,000 pounds to 1,000,000 pounds.[6] The peculiarities of the life-history of the mussel makes artificial propagation exceedingly difficult, and other means, such as the establishment of closed seasons and the fixing of limitations as to the size of mussels to be taken, must be adopted to insure the preservation of this fishery.

---

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 50.
[2] *Report of U. S. Commissioner of Fish and Fisheries, 1901*, p. 670.
[3] *Ibid.*, p. 66.
[4] U. S. Census Report, *Fisheries of the United States, 1908*, p. 65.
[5] *Ibid.*, 125.
[6] *Ibid.*, 66.

Until early in the nineteenth century, when the carp and mussel fisheries took precedence, the buffalo-fish and catfish were the most valuable species taken from the Mississippi and its branches. Catfish of various species are found throughout practically the entire United States, but about one-half the usual catch is taken in the Mississippi district. Buffalo-fish are taken on a commercial scale in very few other streams. The product of catfish taken in the Mississippi and its tributaries in 1908 amounted to 8,073,000 pounds, valued at $395,000; the product of buffalo-fish was 15,040,000 pounds, with a value of $455,000.[1]

Fresh-water drum and black bass, which are the next most important species of the Mississippi system, are found in all the Central States. Of the product of the former taken in this section in 1908, valued at $129,000, Illinois, Wisconsin, Ohio, and Missouri produced about one-half; and of the product of the latter, valued at $128,000, over three-fourths came from Illinois, Missouri, and Arkansas.

All of the important fish of the interior waters of the country are artificially propagated and distributed among ponds, lakes, and streams by the United States Bureau of Fisheries and by a number of State commissions. Fishing in both the larger and smaller bodies of water is regulated by law in most States for the purpose not only of preserving the commercial fisheries, but also of maintaining the supply of game fish which provide sport for the army of anglers who frequent stream and lake in search of pleasure and relaxation.

---

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 26.

CHAPTER XXXV.

THE FISHERIES OF THE PACIFIC COAST.

Rapid development of Pacific coast fisheries, 211. Location of the most important fishing-grounds, 211. Salmon fisheries, 212. Beginning of salmon canning, 213. Canning of salmon in Alaska, 214. Regulative measures established by State and Federal governments for preservation of salmon, 215. The seal fisheries, 216. The early fur-seal fishery of the Pribilof Islands, 216. Reckless killing of seals, 217. Leases of seal fishery to Alaska Commercial Company and to North American Commercial Company, 218. Pelagic sealing and its destructive effect, 218. Increase of fur-seal herd since 1912, 219. Whale fisheries, 220. Other fisheries, 220. Introduction of Atlantic coast fish to the waters of the Pacific, 222.

The Pacific coast fisheries of the United States, including the fisheries of three States—California, Oregon, and Washington—and of the Territory of Alaska, are of comparatively recent origin, none of them, except the fur-seal fishery, antedating 1850. Notwithstanding the short period of their existence, however, they have developed so rapidly that they rank among the most valuable fisheries of the country. In 1908 the fisheries of the three Pacific States gave employment to 13,855 men, represented a capital investment of $6,468,000, and had a product of a total value of $6,839,000.[1] Washington, which was the leading State, with products valued at $3,513,000, held fourth place among all the States, being surpassed only by Massachusetts, Virginia, and New York. Since the yearly reports published concerning the Alaska fisheries do not give separate data for the fishing industries and the canning industries, statistics are not available for comparison with those just given for the Pacific States. Apparently, however, the fisheries of Alaska in 1908 afforded employment to about 6,000 men and had a product which returned the fishermen approximately $4,000,000.[2] The product of all the fishing industries of the Territory for that year, including the canned salmon, which constituted the largest part, was valued at $11,847,443.

The most important fishing-grounds of the Pacific coast of North America lie from Puget Sound northward. Unlike most of the Atlantic coast, the coast of the three Pacific States is regular and unprotected by outlying islands and bars, and, with the exception of a few rivers such as the Columbia, Klamath, and Sacramento, and some infrequent bays, there are few places adapted to extensive or valuable inshore fisheries. Moreover, the narrow continental shelf provides scant area for offshore fisheries. Consequently, aside from the salmon fisheries in the few bays and rivers, the fisheries of the region south of Puget Sound are relatively of small importance. Northward from Puget Sound, however, the physical conditions are entirely different. Broken by numerous bays and rivers, and lined by almost countless islands, the

---

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 11. [2] *Ibid.*, 298.

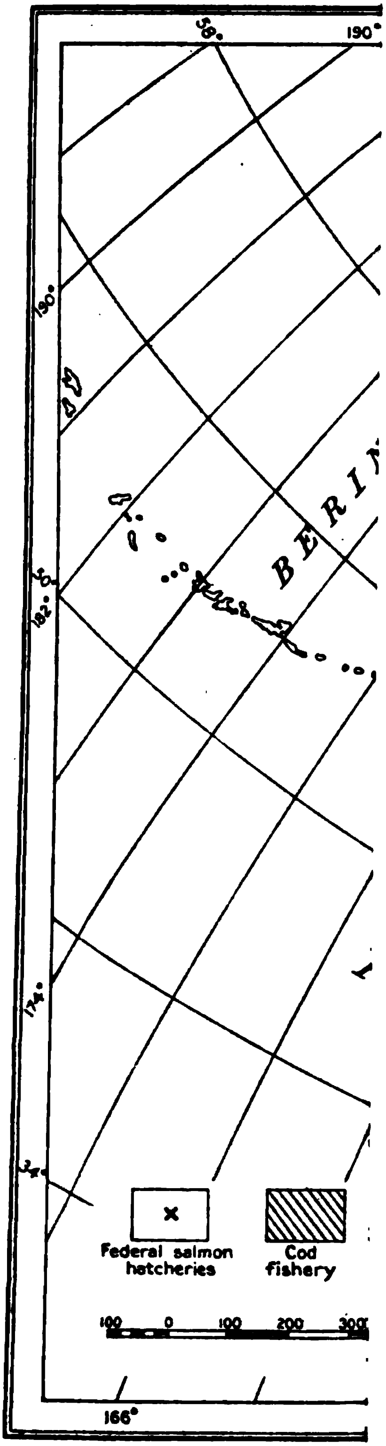
coast affords admirable conditions for extensive fisheries, and the wide continental shelf, with its great expanse of relatively shallow waters, compares favorably with the "banks" of the North Atlantic Ocean as an abode for cod, halibut, pollack, and other ground-fish. In the cold waters of the Arctic region are found the chief whaling-grounds of the present time, and two bleak islands lying in the heart of the Bering Sea have been for nearly a century the most important fur-seal breeding-grounds in the world.

Until just recently the salmon, whale, and fur-seal fisheries were the only important fisheries developed on the Pacific coast. The salmon fishery still holds the position of chief importance, but the whale fishery, which reached the climax of its development a score of years ago, is on the verge of extinction, and the fur-seal industry, which for three-quarters of a century ranked among the most valuable fishing industries of North America, has, by ruthless slaughter of the seals, been reduced to a position of relative unimportance and is kept alive only by careful government regulation and an international agreement for its protection. The ground-fish industry of the Pacific coast has been growing rapidly during recent years. The halibut fishery of Washington, which is by far the largest in the United States, ranks next to the salmon fishery on the Pacific coast, and the cod fishery is rapidly gaining in relative rank.

SALMON FISHERIES.

Among the various fisheries of the Pacific coast the salmon fishery is by far the best known and the most valuable. Of the fishing industries of the entire world only two, the oyster and the herring industries, rank above the industries dependent upon the salmon, and in the United States the salmon industry is exceeded in importance only by the oyster fishery. In the United States the salmon fishery is important only on the Pacific coast. At one time salmon fisheries of some value existed in the rivers of the Atlantic coast, especially in New England, but these were long ago practically exhausted or destroyed and at present are of little significance. On the Pacific slope the salmon is the leading fishery product in each of the three States, as well as in Alaska, and the value of the salmon catch constitutes over two-thirds of the value of the entire product of the Pacific coast fisheries.

The salmon are anadromous fish appearing in very large numbers at regular seasons of the year in practically all the rivers flowing into the north Pacific Ocean, in both Asia and North America. Five species of salmon occur in the north Pacific, all of them being found in greater or less abundance along the American coast, ranging northward from Monterey Bay. Of the five species the most valuable is the chinook, quinnat, or king salmon. It ranges along the coast from Ventura River California, to Norton Sound, Alaska, but is found in greatest abundance



58°
190°
190°
50°
182°
174°
34°
166°
BERIN
Federal salmon hatcheries
Cod fishery
100
0
100
200
300

in the Columbia River. The sockeye, blueback, or red salmon, though neither so large nor of such good quality as the chinook, is caught in larger quantities than any of the other species, and forms the greater part of the canned-salmon product. It occurs most plentifully in Alaska and British Columbia, though it is taken in considerable quantities in the rivers of Washington and Oregon, and a few have been found as far south as the Sacramento River. The silver or coho salmon occurs as far south as Monterey Bay, but the largest catch of this species is taken from Puget Sound and its tributaries. The humpback or pink salmon is the smallest of the American species, though it usually ranks next to the blueback as regards the quantity of the yearly catch. It is found in greatest abundance in southeastern Alaska, and is rarely taken in commercial quantities south of Puget Sound. The fifth species is the dog or chum salmon. It has a wide distribution, from San Francisco on the south to Bering Strait on the north, but is most abundant from Puget Sound northward.

Like many other fisheries of the United States, the salmon fisheries of the Pacific States and Alaska were utilized by the Indians and later by the early white settlers, but the first commercial salmon fisheries were started in 1852, when some inhabitants of the settlement which later became the city of Seattle began to catch the fish and sell them, fresh or salted, at various points along the coast.[1] The next commercial enterprise of importance was begun on the Columbia River about 1861, when an establishment for packing salted salmon was started at a place known as Oak Point, about 60 miles below Portland.[2] It was not until the beginning of the salmon-canning business, however, that the salmon fishery began its rapid growth. The canning industry had its origin on the Sacramento River in 1864, when some natives of New England, who were familiar with the canning of fish in their native States, seeing in the plentiful supply of salmon a possible source of wealth, set up a small salmon cannery on a floating scow opposite the site of Sacramento.[3] The first year these men put up about 2,000 cases of 48 one-pound cans to the case. At first no one could be found willing to purchase or even handle the new product, and the venture would have been unsuccessful had not a commission firm sent a part of the pack to Australia. During 1864 and 1865, though the run of salmon in the Sacramento River was light, the canning business was continued, and a small but profitable trade was built up with Australia and the Pacific countries of South America. The light runs of fish in the Sacramento River induced the California canners to visit the Columbia River in 1866 in search of more favorable fishing-grounds. Here they found what seemed to be an inexhaustible supply of salmon, and they at once erected a cannery at Echo Cliff, about 40 miles above Astoria.[3] Two years later another cannery was established at the

[1] Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries, Doc. No. 751), 12.
[2] *Ibid.*, 14. [3] *Ibid.* 20.

same place. About the time of the starting of the canneries on the Columbia River a domestic demand for canned salmon began to develop, and with the expansion of the home market, and the foreign market, too, the production of canned salmon grew by leaps and bounds. Canneries were built along every river or bay where there was a salmon run of any importance. By 1880 the canneries on the Columbia River were producing 500,000 cases a year.[1]

In 1878 the first canneries were established in Alaska, and about the same time the canning industry was started on the Klamath and Smith Rivers in California and on the coast of Puget Sound.[2] The Alaska canneries took the lead in production about 1888, and ever since then they have held first place, having in recent years a larger output than all other canneries on the Pacific coast combined. The product of the Alaskan district gradually grew from 8,159 cases in 1878 to 4,056,021 cases in 1912.[3] The Columbia River industry, which ranks next to that of Alaska as regards the total output since the beginning of the canning business, has had a product of less than 300,000 cases a year only twice since 1874, and in one year (1895) the output reached 634,696 cases.[4] The product of the Puget Sound canneries since 1899 has usually ranked next to that of the Alaska canneries. Because of the quadrennial recurrence of the run of sockeye salmon and the biennial appearance of the large run of the humpback species, the Puget Sound industry is subject to great fluctuations, the pack being comparatively small in the even years and exceedingly large in each year following a leap year. For instance, the pack in 1908 was only 448,765 cases and in 1909 was 1,632,949 cases.[5] These three districts—Alaska, the Columbia River, and Puget Sound—furnish over 95 per cent of the annual canned-salmon output of the United States. Grays Harbor, Willapa Harbor, and the small coastal streams of Oregon contribute a few thousand cases each year, and in some years salmon are canned on the Eel and Klamath Rivers in California. Since 1905 salmon-canning on the Sacramento River has been abandoned, the catch there being mild-cured or sold fresh. Table 80 shows the statistics of salmon-canning in the important districts for a few selected years.

TABLE 80.—*Quantity of salmon canned, selected years, 1870 to 1910.*

Year.	Puget Sound.	Columbia River.	Alaska.	Year.	Puget Sound.	Columbia River.	Alaska.
	cases.	*cases.*	*cases.*		*cases.*	*cases.*	*cases.*
1870	....	150,000	....	1900	469,450	358,772	1,548,139
1880	5,100	530,000	6,539	1901	1,380,590	390,183	2,016,804
1890	8,000	435,774	682,591	1909	1,632,949	274,087	2,395,477
1899	919,611	332,774	1,078,146	1910	567,883	391,415	2,413,054

[1] Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 121.
[2] *Ibid.*, 22, 18. [3] *Ibid.*, 122; *Report of Commissioner of Fisheries, 1913*, p. 34.
[4] Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 121.
[5] *Ibid.*, 124.

Though by far the largest part of the salmon catch is canned, part of it is consumed fresh and part is prepared for market by mild-curing, pickling, smoking, or freezing. Mild-cured or "sweet-pickled" salmon are salted down lightly in tierces and kept in cold storage until used. In 1909 over 13,000,000 pounds of salmon were prepared in this manner.[1] In the same year about 9,000,000 pounds were pickled in brine, 4,300,000 pounds frozen, and 1,100,000 pounds smoked. During the Russo-Japanese war large quantities of dog salmon were dry-salted for exportation to Japan, but when the war ended and the Japanese fishermen resumed their operations the dry-salting of salmon in the United States was virtually abandoned.[2]

As has been the case with most of the fisheries in the United States which have at one time appeared inexhaustible, the salmon fishery has been threatened with depletion on account of the evils of extravagant methods of fishing and the reckless destruction of the supply of fish. To meet the danger of exhaustion of the salmon, the Pacific States have enacted regulative measures, while the Federal Government has protected the fisheries of Alaska and has also cooperated with the Canadian Government for the protection of the fisheries of the waters of Puget Sound. In addition to the enactment of the various measures providing for closed season and regulating the methods of fishing, the State and Federal governments have for a number of years conducted extensive hatching operations in all the important salmon-canning districts. Artificial propagation of salmon was first started in California about 1878, when the Federal Government erected a hatchery on the McCloud River for the purpose of securing a supply of fish with which to stock the rivers of the Middle Atlantic States.[3] The experiment was a failure as far as the rivers of the Atlantic coast were concerned, but the practice of hatching salmon artificially became a recognized success, and coming just at the time when the growing canning industry was making heavy inroads on the supply of fish, the movement was readily turned to an attempt to maintain the salmon on the Pacific coast. California, Washington, and Oregon each has several hatcheries, and the Federal Government also possesses hatching stations in these States. In Alaska the operators of the salmon canneries voluntarily began to engage in the work of hatching salmon in the early nineties. In 1900 Congress enacted a law requiring the owners of the Alaska canneries to maintain hatcheries and liberate each year red salmon fry to equal four times the number of salmon taken during the fishing season.[4] In 1902 the required number was increased to ten times the number of all salmon taken.[5] Although this regulation was compulsory, it was generally neglected, because packers found the operations of hatcheries too expensive or because they possessed no site near their canneries suitable for the erection of hatch-

---

[1] Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 137.
[2] *Ibid.*, 62. [3] *Ibid.*, 154. [4] *Ibid.*, 175. [5] *Ibid.*, 176.

ing-stations. In 1906 the law was revised. The compulsory feature was eliminated, but to encourage artificial propagation the packers who operated hatcheries were reimbursed for their work by exemption from the payment of license fees on 10 cases of salmon for each 1,000 fry liberated.[1] In 1905 the Federal Government established a hatchery at Yes Bay, Alaska, and another in 1907 on Afognak Lake.[2] The combined output of the State, Federal, and private hatcheries amounts each year to over a half billion salmon fry. That the salmon run in recent years has maintained its abundance has probably been due to the work of artificial propagation.

SEAL FISHERIES.

Next to the salmon fishery, the fur-seal fishery of Alaska has been the most valuable fishery of the Pacific coast, though for a number of years this industry has been in a precarious state. The fur-seal industry dates back more than a century and a quarter to the discovery and occupation of the Pribilof Islands by the Russians. It was near the close of the seventeenth century that the vanguard of Russian traders pushed across the plains of Siberia and reached the coast of Kamchatka in their quest for fur. There, on the border of the Pacific, they found the beautiful and valuable fur of the sea otter. So vigorously and ceaselessly did they hunt the otters, that by the middle of the eighteenth century these animals were practically exterminated along the Kamchatka coast, and though new hunting-grounds were then discovered on the islands of the Bering Sea, these grounds also were soon exhausted. With the disappearance of the otter the Russians began to take the pelts of the fur-seal, which had received but little attention, while the otters were plentiful. The Commander Islands, which were discovered in 1741, were for a time the chief source of seals, but the supply there was not large. From observations of the migration of an enormous herd of seals through the passes and channels between the Aleutian Islands the Russian traders knew that there were large breeding-grounds to the northward, and they sent several expeditions to seek out the islands which they were certain could be found somewhere in the Bering Sea. In 1786 a trader and navigator by the name of Pribilof came upon one of the sought-for islands, of which he took possession for the Russian Government and named it St. George, after his ship. The next year a second island was discovered and named St. Paul. Two more small islands were subsequently found and the group of four were eventually named after their original discoverer. The two larger islands, St. Paul and St. George, have the most famous seal rookeries in the world. Situated almost in the center of the Bering Sea, where the poleward-moving currents from the Pacific give rise to constant heavy fogs and drizzling mists, they have the cool,

---

[1]Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 176.
[2]*Ibid.*, 177.

moist climate which the seals require, and they are at the same time far enough south to be beyond the reach of permanent ice floes, which would hinder the access of seals to the breeding-grounds. Along with suitable climatic conditions, the islands possess a shingly beach, with neither loam nor sand, which the seals require for their rookeries. No other place in Alaska, either on the mainland or on the chain of Aleutian Islands, has ground of this character.

When the Pribilof Islands were discovered, they were visited annually by millions of seals. A score or more of rival traders hastened to occupy the new grounds, and an indiscriminate and wasteful slaughter of the seal herd was soon in progress. In 1799 the Russian-American Company, a trading company chartered by the Czar, secured the monopoly for twenty years of the fur trade of all the coast of America on the Pacific and of the islands in that ocean from Bering Strait to the fifty-fifth degree of latitude. On securing control of the territory the company at once put a stop to the reckless butchering of seals on the Pribilof Islands. An attempt was then made to limit the extent of killing, but unfortunately for a time no discrimination was exercised as to which seals could be killed. The continuation of the practice of destroying the female seals soon depleted the herd to such an extent that it became necessary to suspend sealing altogether in order that the herd might have time to recuperate. In 1806 and 1807 sealing was suspended and again in 1834.[1] It soon became apparent that the preservation of the herd depended upon the protection of the female seals, and gradually killing was limited to males, and later the breeding males and very young seals also were protected. Under these conditions the herd increased in number again, so that in 1864 the agents of the Russian-American Company, which continued to hold control of the islands from the time of the granting of its first charter until 1867, deemed it possible to take 70,000 seals a year on St. Paul alone.[2]

With the purchase of Alaska from Russia in 1867, the United States secured possession of the Pribilof Islands. Two men, representing some California and New England interests, went to the islands in 1867, and, taking posession of the rookeries the following year, they slaughtered 300,000 seals.[2] It was apparent that such wholesale destruction, if long continued, would bring about the speedy extermination of the seal herd. The subject of the protection of the seals was consequently brought to the attention of Congress, which in 1870 enacted a law providing that the season of killing should be limited to June, July, September, and October; that it should be unlawful to kill female seals or seals less than one year old; that for a period of twenty years the annual catch should not be more than 100,000; and that the privilege of sealing should be leased for twenty years by the Secretary of the Treasury, the lessee paying an annual rental of not less than $50,000

[1] Elliott, *The Seal-Islands of Alaska* (U. S. Census 1880), 140.
[2] Jordan, *The Fur Seals and Fur-Seal Islands*, pt. 1, 26.

and a tax or duty of $2.62½ on each seal taken, and also providing for the maintenance and education of the natives living on the seal islands.[1]

In accordance with the provisions of this act the privilege of sealing on the Pribilof Islands was leased to the Alaska Commercial Company, a California corporation. The company was required to make ample provision for the care of the natives and to pay an annual rental of $55,000, in addition to the stipulated tax or duty on each pelt taken and shipped. In 1890 the sealing privilege was leased to the North American Commercial Company, the terms of the new lease providing for the maintenance of the natives, limiting the number of seals to be killed annually to 60,000, and increasing the yearly rental to $60,000 and the tax on each pelt secured to $9.62½.[1] When the lease of this company expired in 1910 the leasing system was discontinued and the sealing operations were put directly under the charge of the Secretary of Commerce and Labor. In 1911 the Alaska Fisheries Service was organized and intrusted with entire charge of the supervision of all matters pertaining to the fisheries and fur industries of Alaska. A part of the duties of the officers and agents of this service has been to provide for the care of the natives of the seal islands and to have charge of killing of the seals and the curing and selling of the skins taken.

During the twenty years of the lease of the Alaska Commercial Company the annual catch of seals on the Pribilof Islands amounted to about 100,000, the maximum number permitted by law.[2] After a few years of slaughter at this rate the seal herd began to diminish rapidly, but instead of reducing the number of seals taken, the company, in order to obtain its full annual quota, resorted even to the destruction of two-year-old and yearling seals. So great was the destruction that the North American Commercial Company, though permitted by the terms of its lease to kill 60,000 seals a year, was able to kill more than 30,000 in only one year during the entire term of its lease, and in several years the number killed was less than 10,000.[3] On several occasions it seemed that the seal herd was doomed to extinction.

However, a more potent factor in the reduction of the size of the herd than the catch on the islands was the deep-sea or pelagic sealing. Pelagic sealing has been practiced from time immemorial by the Indians of the northwest coast of North America, who went out in canoes to capture seals in the course of their annual migrations. The number of seals taken in this manner was relatively unimportant, however, until about 1879, when the practice arose of sending vessels from Japan, Russia, the United States, and other countries into the Bering Sea in search of seals. From these vessels and from the numerous canoes sent out by them the swimming seals would be shot with rifles and shotguns. The industry spread so rapidly that within a few years the annual catch of the sealing fleet became an important factor in the skin

[1] Jordan, *The Fur Seals and Fur-Seal Islands*, pt. 1, 28.
[2] Cobb, *The Commercial Fisheries of Alaska in 1905* (Bureau of Fisheries Doc. No. 603), 32.
[3] *Ibid.*; Lembkey, *The Fur-Seal Fisheries of Alaska in 1909* (Bureau of Fisheries Doc. No. 735), 18.

market, and the depredation of the pelagic sealers began to have a disastrous effect upon the seal herd. Because of the close resemblance of the male and female seals at certain ages, pelagic sealing is necessarily indiscriminate, and seals of all ages and both sexes are subject to slaughter. The killing of the female seals not only resulted in the decimation of the breeding-herd, but caused the death of many young seals left to starve through the killing of their mothers. In 1896, when pelagic sealers were especially active in their operations, over 16,000 young seals starved on the Pribilof Islands.[1] Furthermore, pelagic sealing was accompanied by an enormous waste, because usually only a small percentage of the seals killed or wounded were landed in the vessels from which they were shot.

At the first entry of the pelagic sealers into the Bering Sea the United States Government attempted to establish ownership in the seals and make the Bering Sea a *mare clausum.* This effort was immediately opposed by England, and the Bering Sea controversy began its course. The details of this controversy will be considered in the next chapter. Suffice it to say here that the attempt of the United States to put a stop to pelagic sealing by the citizens of other countries was unsuccessful, and though pelagic sealing by citizens of the United States was prohibited, the ravages of the deep-sea hunters did not come to a final end until 1912, when a convention, entered into by the four nations chiefly interested in the question at issue, provided for the suppression of pelagic sealing.

As a consequence of the stopping of the destruction of seals at sea and of the diminution of the killing on the Pribilof Islands, the seal herd is beginning to increase in numbers again. In 1910 an approximate census of the rookeries of St. George and St. Paul showed a herd numbering 132,279. In 1912 a census showed a herd of 215,940 seals, and in 1913 the number had increased to 268,305.[2] The killing has been limited to two- and three-year-old "bachelor" seals, and in 1913 a law went into effect providing that for five years the number of seals killed should be restricted to an amount sufficient to supply the needs of the inhabitants of the islands for food.[3] Under these conditions the herd is certain to increase in size, and it should be only a few years until the rookeries are again thickly populated during the breeding-season.

Both to the commercial companies to which the sealing privileges were leased and to the United States the fur-seal fishery has been extremely profitable. The average price of seal skins taken on the island from 1870 to 1880 was about $10, from 1880 to 1900 it was more than $20, and since 1900 it has been more than $30. The receipts of the Government from the rentals and taxes imposed on the two lessees were about $10,000,000, a sum considerably greater than that paid for the entire Alaska Territory. Since the Government took charge of

[1] Jordan, *The Fur Seals and Fur-Seal Islands*, pt. 1, 169.
[2] *Report of U. S. Commissioner of Fisheries, 1913*, p. 37.
[3] Everman, *Alaska Fisheries and Fur Industries in 1913* (Bureau of Fisheries Doc. No. 797), 156.

the killing, the annual income from the sale of skins has averaged about $200,000. In addition to the income from the seal skins, the Government also derives a small revenue from the sale of pelts of other fur-bearing animals of the Pribilof Islands.

WHALE FISHERIES.

The whaling industry began on the Pacific coast of the United States in 1850, when an old whaling vessel, the *Popmunnett*, was dispatched from San Francisco on a voyage to the Galapagos Islands and the coasts of Chile and Peru.[1] With the exception of a small shore whaling industry carried on from 1855 to 1887, at Monterey, Crescent City, and a few other points in California, the entire whaling industry of the western coast was confined to the operations of vessels from the port of San Francisco, until in 1913, when a few vessels were reported from Juneau, Alaska.[2] At San Francisco whaling was of but little importance for a number of years after its beginning in 1850. From 1850 to 1860, while the industry was at its maximum of prosperity in New England, San Francisco had but little interest in the business, and as late as 1879 the fleet of that port numbered only three vessels, of a total burden of 630 tons. Commencing in 1880, however, the San Francisco fleet gradually increased in size. Some New England interests transferred their vessels to California, oil refineries were erected at San Francisco, steam whaling-vessels and improved killing methods were introduced, and for a time the business was prosperous. The climax was reached in 1893, when the San Francisco fleet consisted of 33 vessels, of a total of 8,502 tons. Thereafter whaling declined on the Pacific coast, just as it had declined years before in New England. The best year of the San Francisco fleet was in 1891, when its product of bone and oil reached a value of $1,190,000.[3] In 1892 the value of the product was $1,000,000, but in 1895 it fell to $307,000, and in 1908 it was only $132,000. The fleet constantly diminished in size, the vessels registered from the port in 1913 numbering only 10, half of them sailing vessels and half steam, the tonnage of the entire fleet amounting to 3,341 tons. From Juneau six steam whaling-vessels were reported in 1913, with a total burden of 764 tons.

OTHER FISHERIES.

Though the whale and the fur-seal fisheries of the Pacific coast have suffered a decline, the loss has been to a large extent compensated for by the rise of other fisheries, most important of which are the halibut and cod. Some of the best halibut grounds in the world are found along the coasts of Washington, British Columbia, and Alaska, and climatic conditions do not, as on the Atlantic coast, render halibut fishing excessively dangerous and expensive. The halibut fishery

---

[1] Tower, *History of the American Whale Fishery*, 60.
[2] *Report of Commissioner of Navigation, 1913*, p. 195.
[3] U. S. Census Report, *Fisheries of the United States, 1908*, p. 77.

began on the western coast as early as 1868, when some New England vessels visited the Puget Sound district and took about 240,000 pounds of fish. Because of the sparse population and the high costs of transportation eastward, this initial venture was not very profitable, and though the business was continued it grew but slowly, the entire product of the Pacific coast as late as 1888 amounting to only a little over 1,000,000 pounds.[1] The increasing demand for halibut, both in the Pacific and in the Eastern States, and the improvement of the facilities for transcontinental shipment of perishable products, soon stimulated the fishery greatly, however, and the decline of the catch of the New England fleet caused an enlargement of the market for the halibut taken on the Pacific coast. By 1904 the catch of Washington, which is the only one of the Pacific States having an extensive halibut fishery, amounted to 12,000,000 pounds; in 1908 it was 30,000,000 pounds, and in 1912, about 35,000,000 pounds. The value of the annual catch of the fishermen of Washington alone now approximates $2,000,000. In Alaska, too, there is a large and growing halibut fishery. In 1908 the Alaska fishermen took 4,500,000 pounds of halibut and in 1910 their catch amounted to 21,000,000 pounds.[2]

The cod-fishing grounds off the coast of Alaska were discovered in 1866. For a time the fishery developed rapidly, but because of the lack of a market and the tendency of capital to seek investment in the promising salmon fisheries, it soon declined and remained comparatively unimportant until about 1890, when the introduction of the new method of preparing the cod as boneless fish again stimulated an interest in the fishery. Cod fleets were gradually built up in both Washington and California, and the combined catch of both States has in recent years amounted to more than 7,000,000 pounds annually.[3] Alaska also has a cod fishery, the annual catch there approximating 5,000,000 pounds. Both the cod and halibut fisheries have helped stimulate the herring fisheries of the Alaska coast, large quantities of herring being taken and sold for bait to the cod and halibut fishermen. Part of the herring catch is converted into oil and fertilizer, and lately a part of it has been smoked and pickled for food.

The oyster fishery of the Pacific States, which ranks next to the halibut industry in point of value, is of only minor importance in comparison to the great oyster fisheries of the Atlantic coast. Only a few places on the Pacific coast are suitable for oyster-beds, the most important localities being San Francisco Bay, California; Yaquina Bay, Oregon; and Willapa Bay, Grays Harbor, and the bays and inlets of Puget Sound, Washington. Since in these places even the oyster grounds are usually exposed at low tide, the oysters are in constant danger of freezing in winter. The native oysters of the Pacific States

[1] U. S. Census Report, *Fisheries of the United States, 1908*, p. 58.

[2] *Report of U. S. Commissioner of Fisheries, 1911*, p. 25.

[3] U. S. Census Report, *Fisheries of the United States, 1908*, p. 53; *Report of U. S. Commissioner of Fisheries, 1913*, p. 62.

are of an inferior quality, and the eastern oysters which are planted along the coast do not propagate. Because of these conditions and because of the limited area suitable for oyster-grounds, it is not likely that the oyster fishery of the Pacific States will ever be of great value. In recent years, in fact, it has shown a tendency to decline, the output of 213,579 bushels in 1912 being less than half the quantity gathered in 1899.[1] But on account of their scarcity the oysters command a very high price, the small product in 1912 being valued at $676,243.

An interesting feature of the history of the fisheries of the western coast has been the introduction of valuable species of fish indigenous to the waters along the Atlantic coast, and hitherto unknown on the west coast. The first experiments in this line were made with the shad, a number of small plants of which were deposited by the United States Fish Commission in the Sacramento and Columbia Rivers between 1871 and 1886.[2] The experiments were remarkably successful, and not only have the shad become abundant in the rivers where the plants were made, but they have migrated and established themselves in practically all the rivers for a distance of 4,000 miles along the coast from Los Angeles County to Cook Inlet. Since 1886 the shad has been one of the most abundant food-fish of California, though because of the small demand the catch is yet small compared to what it might be. However, in 1908, California reported a shad product of over 1,000,000 pounds, and Washington and Oregon each had an established shad fishery.[3] The striped bass has also been successfully introduced on the Pacific coast and efforts are being made to colonize the lobster.

Considered as a whole, the fisheries of the Pacific coast are steadily growing in value and importance. Though the salmon fisheries still outrank all other fisheries combined, the rapid growth of the halibut and cod fisheries and the conservation of the fur-seal fishery mean that before long the importance of the salmon will be comparatively less. Furthermore, great fishing resources along the Alaska coast are yet practically untouched. Of 300 species of fishes known to inhabit the waters of Alaska, less than a score are utilized as food, and of a large number of varieties of shellfish, both mollusk and crustacean, a small portion is being used. Large areas of cod-fishing grounds remain unexploited, and the halibut fishery has by no means reached the limit of expansion. The herring alone, which as yet are used chiefly for oil, fertilizer, and bait, are sufficiently abundant to support sardine and smoked-herring industries as large as those on the Atlantic coast. Capelin, smelt, trout, clams, crabs, and many other valuable species exist in large quantities in Alaskan waters. No place in North America offers more favorable opportunities for the development of valuable fishing industries.

---

[1] *Report of U. S. Commissioner of Fisheries, 1913*, p. 49.

[2] Smith, *The U. S. Bureau of Fisheries, Its Establishment, Functions*, etc. (Bureau of Fisheries, Doc. No. 725), 1403.

[3] U. S. Census Report, *Fisheries of the United States, 1908*. p. 71.

CHAPTER XXXVI.

THE FISHERIES AS AN INTERNATIONAL QUESTION.

Treaties of 1783 and 1818, 223. Controversy over treaty of 1818, 224. Seizures under the "headlands theory," 225. The Reciprocity Treaty of 1854, 226. Attempts of Canada to restrict operations of American fishermen, 1868–1870, 227. The Treaty of Washington, 1871, 227. The Chamberlain-Bayard Convention and *modus vivendi* of 1888, 229. The Blaine-Bond Convention of 1890 and the Bond-Hay Convention of 1902, 230. Agreement to arbitrate North Atlantic fisheries dispute, 1909, questions submitted, 231. Decision of the arbitration tribunal, 232. Controversy over the fur-seal fisheries, 235. Questions submitted to arbitration in 1893, 236. Award of the arbitrators in the fur-seal controversy, 237. Agreement of United States, Great Britain, Russia, and Japan regarding fur-seal fisheries, 1911, 238.

The Government of the United States, in attempting to protect and extend the fishing interests of the country, has become involved in two important international controversies—one with respect to the fisheries of the North Atlantic Ocean and the other with respect to the fur-seal fisheries of the Bering Sea.

TREATIES OF 1783 AND 1818.

The North Atlantic fisheries question had its origin in 1783, at the time of the signing of the treaty of peace in which England acknowledged the independence of the thirteen States. Under the provisions of that treaty the people of the United States were confirmed in their right to take fish on the Newfoundland banks and at other places in the sea which they had been accustomed to visit, and they also secured from Great Britain the liberty to take fish on the coasts, bays, and creeks of all parts of the British possessions in America, as well as the privilege of drying and curing fish in the unsettled bays and harbors of Nova Scotia, Labrador, and the Magdalen Islands. At the time of the negotiation of the treaty of peace following the War of 1812, the question arose as to whether the fishery concessions contained in the Treaty of Paris had been terminated by the war. The British commissioners affirmed that, by making war on Great Britain, the United States had lost the fishing privileges; the American commissioners took the position that those privileges remained undisturbed. It was impossible to reach a mutually satisfactory agreement on the subject, and the treaty was eventually signed without reference being made to the fisheries. Shortly after peace was established, the British authorities in Canada, acting in pursuance of the theory that the United States had forfeited the concession made in 1783, seized several New England vessels engaged in fishing along the coast of Nova Scotia.[1] Though the vessels were subsequently released, the British Government persisted in declaring its right to exclude all vessels of the United States from the

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, "The Case of the United States," 42.

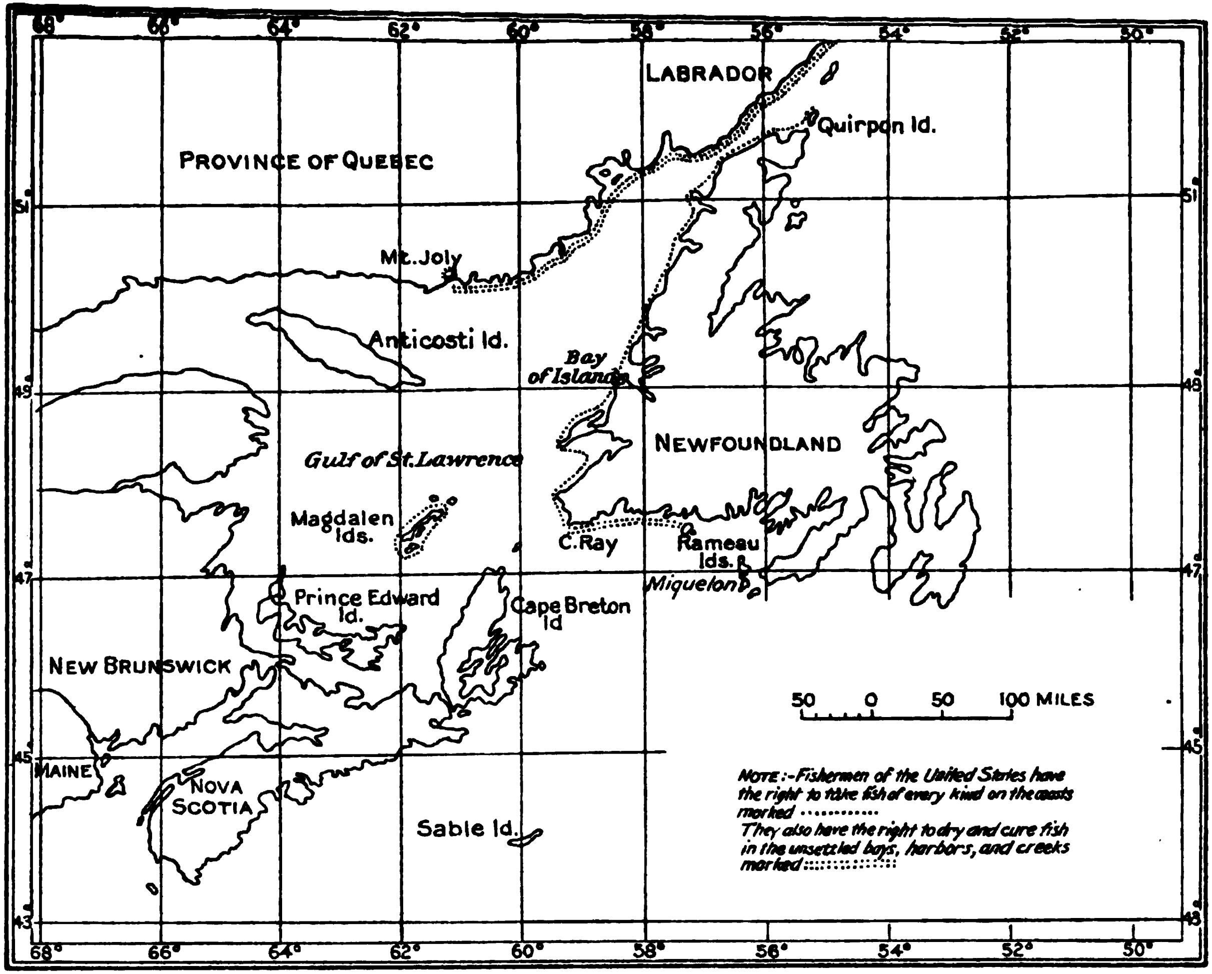
coast fisheries of British territory. With the two governments holding diametrically opposing views, it was necessary, in order to avert a serious collision, to negotiate a new treaty, and accordingly in 1818, when the general commercial treaty between the two nations was renewed, an agreement concerning the fisheries was included. This agreement, which constituted Article I of the treaty, was as follows:[1]

"Whereas differences have arisen respecting the Liberty claimed by the United States for the inhabitants thereof, to take, dry and cure Fish on Certain Coasts, Bays, Harbours, and Creeks of His Britannic Majesty's Dominions in America, it is agreed between the High Contracting Parties, that the inhabitants of the said United States shall have forever, in common with the Subjects of His Britannic Majesty, the Liberty to take Fish of every kind on that part of the Southern Coast of Newfoundland which extends from Cape Ray to the Rameau Islands, on the Western and the Northern Coast of Newfoundland, from the said Cape Ray to the Quirpon Islands, on the shores of the Magdalen Islands, and also on the Coasts, Bays, Harbours and Creeks from Mount Joly on the Southern Coast of Labrador, to and through the Streights of Belleisle and thence Northwardly indefinitely along the Coast, without prejudice however, to any of the exclusive Rights of the Hudson Bay Company: And that the American fishermen shall also have liberty forever, to dry and cure Fish in any of the unsettled Bays, Harbours, and Creeks of the Southern part of the Coast of Newfoundland hereabove described, and of the Coast of Labrador; but so soon as the same, or any portion thereof, shall be settled it shall not be lawful for the said Fishermen to dry or cure Fish at such Portion so settled, without previous agreement for such purpose with the Inhabitants, Proprietors, or Possessors of the ground. And the United States hereby renounce forever, any Liberty, heretofore enjoyed or claimed by the Inhabitants thereof, to take, dry or cure Fish on, or within three marine Miles of any of the Coasts, Bays, Creeks or Harbours of His Britannic Majesty's Dominions in America not included within the above-mentioned limits: Provided however, that the American Fishermen shall be admitted to enter such Bays or Harbours for the purpose of Shelter and of repairing Damages therein, or purchasing Wood, and of obtaining Water, and for no other purpose whatever. But they shall be under such Restrictions as may be necessary to prevent their taking, drying or curing Fish therein, or in any other manner whatever abusing the Privileges hereby reserved to them."

It was thought at the time that in this convention an amicable solution of the fisheries question had been reached, but serious disagreements soon arose as to the meaning of various passages of the treaty, and for almost a century, until the interpretation of the words of the agreement was determined by a court of arbitration in 1910, the fisheries question was a source of almost constant friction between the governments of the United States and Great Britain.

The first serious controversy over the meaning of the treaty, which arose in 1839, had to do with the phrase "within three marine miles of any of the Coasts, Bays, Creeks or Harbours of His Britannic Majesty's Dominions in America." For several years subsequent to the conclusion of the treaty the fishermen of the United States were allowed to fish

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, II, 25.



MAP 10. FISHING PRIVILEGES OF THE UNITED STATES UNDER THE TREATY OF 1818.

(From McFarland's *History of the New England Fisheries.*)

in any of the bays and harbors of the non-treaty coasts, so long as they did not pursue their operations within 3 miles of the shore. In 1839 the government of Nova Scotia announced that vessels fishing within 3 miles of the mouth of a bay, that is, within 3 miles of a line drawn from headland to headland, would be considered as having violated the renunciatory agreement made by the United States in 1818.[1] This startling interpretation of the treaty was thought in the United States to be a part of a studied policy to hamper the New England fishing industries, the competition of which, especially in the mackerel industry, the Nova Scotia fishermen were keenly feeling. In 1836 the legislature of Nova Scotia had passed a "hovering act," under the provisions of which the provincial authorities were able to subject the fishermen from the United States to many vexatious restrictions, but all the early seizures under this law were made for acts alleged to have been committed within 3 miles of the land.[2] Under the new interpretation seizures could be made anywhere in the great indentations of the Nova Scotia coast, such as the Bay of Fundy and the Bay of Chaleurs, in which the fishermen of the United States for years had pursued their calling unmolested.

Two seizures were made under the "headlands theory." The first occurred in May 1843, when a customs officer of Nova Scotia seized the fishing schooner *Washington* while engaged in fishing in the Bay of Fundy about 10 miles off the coast, and the second, in August 1844, when the schooner *Argus* was taken while fishing about 15 miles off the Cape Breton coast, but according to the report of the officer making the seizure, "still much within the bay that is formed by a straight line drawn from Cape North to the northern head of Cow Bay."[3] Both schooners were condemned and sold. The United States Government lodged a vigorous protest against the enforcement of the "headlands doctrine," contending that the treaty entitled American vessels to engage in fishing operations anywhere along the coast 3 miles or more from the shore. The British Government, though not abandoning the doctrine of headlands asserted by Nova Scotia nor disavowing the seizure of the two schooners, consented in April 1845, as a matter of expediency, to relax the rule as regards the Bay of Fundy, and, but for the opposition of Nova Scotia, would have extended the relaxation for the time being to all other bays.[4] Under the Claims Convention of 1853 the claims of the owners of the *Washington* and the *Argus* were referred to a joint commission. The commission disagreeing, the cases were referred to an umpire, Mr. Joshua Bates, who decided in favor of the claimants in both instances, and at the same time sustained the contention of the United States as to the meaning of the word "bays," as used in the treaty of 1818.[5]

---

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, 95; IV, 77.
[2] *Ibid.*, I, 82–94. [3] *Ibid.*, I, 114; IV, 80. [4] *Ibid.*, IV, 82; I, 118. [5] *Ibid.*, I, 131.

At the time of the relaxation of the headlands rule as regards the Bay of Fundy, Lord Aberdeen, the British Secretary of State for Foreign Affairs, suggested to Mr. Everett, the United States minister at London, that, as a step toward a possible solution of the fisheries controversy the United States might remove the prohibitive duties at that time imposed on Canadian fish. In May 1846, the Canadian Parliament urged the negotiation of a treaty providing for reciprocal freedom of trade between Canada and the United States in some products of the two countries, and subsequently the British colonies proposed that, in exchange for the removal of the tariff duties on their fish, they would be willing to admit the fishermen of the United States to all the coast fisheries which had been renounced in the treaty of 1818. This plan of settlement was first strongly opposed in the United States. In 1852 the British Government sent a small fleet of war vessels to the Nova Scotia coast, ostensibly for the purpose of enforcing the headlands doctrine with regard to all bays except the Bay of Fundy.[1] For a time the relations between the United States and Great Britain were extremely critical. In 1854 Lord Elgin was dispatched to Washington for a conference with Secretary of State Marcy, and as a result of this conference the United States Government consented to the negotiation of a new treaty relating to the fisheries, commerce, and navigation, known as the Reciprocity Treaty of 1854.[2]

RECIPROCITY TREATY, 1854, AND TREATY OF WASHINGTON, 1871.

By this treaty the fishermen of the United States secured liberties similar to those granted in 1783, being admitted to all the sea fisheries on the coasts of British dominions in America; and British subjects in turn were granted the "liberty to take fish of every kind, except shellfish, on the eastern seacoasts and shores of the United States, north of the 36th parallel of north latitude, and on the shores of the several islands thereunto adjacent, and in the bays, harbors, and creeks of the said seacoasts and shores of the United States and of the said islands." The treaty was to last for a fixed period of 10 years and thereafter could be terminated by either party on 12 months' notice. During the time the treaty was in force there was no dispute between the two countries concerning the fisheries, but at the end of 11 years the United States Government, partly because of the dissatisfaction of the farming interests with the reciprocity provisions, and partly because it was thought that the remission of the duty on Canadian fish was of greater value than the concessions granted to the fishermen of the United States, decided to abrogate the treaty, and it consequently became inoperative in 1866, the fisheries relations being left to rest again on the uncertain provisions of the convention of 1818.

Before the reciprocity treaty expired, negotiations were opened between the two governments with a view to making some new arrange-

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, I. 122. [2] *Ibid.*, II. 25.

ment, and pending the conclusion of negotiations the Canadian Government sold licenses to fishermen of the United States desiring to engage in the inshore fisheries of the Canadian coast.[1] At the same time, however, the Dominion Government, to which had been given the authority for the regulation of the fisheries, enacted a law (1868) similar to the Nova Scotia "hovering act" of 1836, imposing extreme restrictions on the operations of all fishing-vessels possessing no special license.[2] In 1870 the license system was discontinued, and under the provision of the act of 1868 a number of seizures were made. Two of these seizures, those of the *White Fawn* and the *J. H. Nickerson*, were especially significant in that they represented the first attempts of the Canadian Government to restrict the commercial operations in which fishing-vessels of the United States had for a long time been permitted to engage. Though the convention of 1818 provided that American fishermen should be permitted to enter the bays and harbors of non-treaty coasts for purposes of obtaining shelter, repairing damages, and securing water and wood, and *for no other purposes whatsoever*, the statute which had been enacted to carry the treaty into effect had imposed no penalty for any action except "fishing or preparing to fish" in the territorial waters of British coasts, and consequently the American fishermen had for a long time freely entered all Canadian ports to purchase bait and all kinds of necessary supplies. Since the courts administered only the statutes and not treaties, it seemed impossible, under the existing laws, to interfere with these commercial privileges. However, in the cases of the *J. H. Nickerson* and the *White Fawn* an attempt was made to identify the purchase of bait with an act of "preparing to fish" and thus render the vessels liable to confiscation. In one of these cases it was decided that the purchase of bait did constitute an act of "preparing to fish," but in the other case a directly opposite decision was rendered, and the question was left for the time being in a most uncertain status.[3]

In 1871, when the Joint High Commission met at Washington to settle several controversies that had arisen between Great Britain and the United States, a new treaty, known as the Treaty of Washington, was concluded, which contained a series of articles relating to the fisheries question. By this treaty arrangements similar to those provided for in the treaty of 1854 were effected, the chief difference being that reciprocal freedom of trade was restricted to fish-oil and fish, and that the southern limit within which British fishermen might have the liberty of engaging in the sea fisheries along the eastern coast of the United States was fixed at 39 degrees north latitude. It was stipulated, too, that the provisions of the treaty should extend to the colony of Newfoundland, and thus the inshore fisheries of the entire coast of that island were thrown open to the fishermen of the United States.

---

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, IV, 13; I, 138.
[2] *Ibid.*, II, 133. [3] *Ibid.*, IV, 414, *et seq.*

This treaty also was to remain in force for a period of ten years, and thereafter until the expiration of two years after notice was given by either country of a wish to terminate the agreement. The British commissioners who helped negotiate this treaty contended that by its provisions the people of the United States received a much more valuable concession than they gave. Though dissenting from this view, the commissioners of the United States agreed to the appointment of a commission which should decide the question and award monetary compensation to Great Britain for whatever loss that country had sustained. The commission which was appointed to decide the question met in 1877 at Halifax and awarded the British Government the sum of $5,500,000, which the United States somewhat protestingly paid.[1] In 1883 the President of the United States was directed by Congress to give notice of the termination of the fishery provisions of the Treaty of Washington, and in 1885 they became inoperative.

Until the time of the adoption of the treaty of 1871, the most serious issue that had arisen with respect to the fisheries was the "headlands doctrine"; but while the treaty of 1871 was still in effect and during the few years immediately following its abrogation several new phases of the controversy arose and came into prominence. Chief among the new sources of disagreement were the question concerning the right of he Canadian and the Newfoundland governments to enforce certain lomestic regulations of the fisheries against fishermen of the United States, and the question concerning the right of the fishermen of the United States to exercise commercial privileges not specifically accorded to them in the convention of 1818. In 1878, just a few months after the announcement of the award of the Halifax Commission, while some fishermen of the United States were taking herring in Fortune Bay, they were attacked and driven away by a mob of Newfoundland inhabitants, who justified their action on the grounds that the United States fishermen were violating Newfoundland statutes regulating the herring fishery and prohibiting fishing on Sunday.[2] The Government of the United States, contending that under the treaty of 1871 the American fishermen were not amenable to the local regulations of Newfoundland, presented a claim for damages to Great Britain. Though compensation was secured for the injuries suffered by the fishermen, the British Government paid it on the grounds that the Newfoundland people had done wrong in taking the law into their own hands, and refused to agree to the contention of the United States that the Newfoundland regulations were not binding on American fishermen. The question as to the commercial privileges of American fishermen had been left in doubt by the conflicting decisions in the cases of the *White Fawn* and the *J. H. Nickerson* in 1870–71. This doubt the Canadian Government attempted to dispel, the next year after the termination of the fishery provisions of the treaty of 1871, by the enactment of a statute

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, I. 161. [2] *Ibid.*, 162.

providing for the seizure of all foreign fishing-vessels which entered Canadian waters for any purpose not permitted in treaty or convention.[1] Against this statute there was a spirited protest on the part of the American fishermen, which resulted in the enactment by the United States Congress, in 1887, of a retaliatory measure by which the President was empowered, at his discretion, to deny any vessel of the British dominions in America entrance into ports of the United States, with such exceptions in regard to vessels in distress or in need of supplies as the President might deem proper to make.[2]

The acute situation engendered by the stringent legislation of both Canada and the United States led to an effort to establish a new treaty, and in 1888 a convention, known as the Chamberlain-Bayard Convention, was negotiated, dealing with the questions of bays and commercial privileges. At the same time a temporary arrangement was established in order to afford a *modus vivendi* pending legislative action on the convention. This *modus vivendi* provided that, for a period of 2 years, the privilege of entering the bays and harbors of the Atlantic coasts of Canada and Newfoundland for the purposes of purchasing bait and other supplies, the transshipment of fish, and the shipping of crews, should be granted to the United States fishing-vessels by annual licenses at a fee of $1.50 per ton. It further stipulated that, if the United States would remove the import duties on fish, fish-oil, whale and seal oil, the licenses should be issued free of charge; that fishing-vessels entering Canadian and Newfoundland harbors for any of the four purposes mentioned in the treaty of 1818 and not remaining more than 24 hours should not be required to enter and clear at a custom-house; and that forfeiture was to be exacted only for the offense of fishing or preparing to fish in territorial waters. The Chamberlain-Bayard Convention failed of ratification in the United States Senate, and consequently never became operative. Between the United States and Canada the *modus vivendi* of 1888 remained in effect, and it has ever since, without formal extension, constituted the basis of the relations between the two countries, as regards the North Atlantic fisheries. The controversy between the United States and Newfoundland, however, did not come to an end.

The Newfoundland people desired the free admission of their fishery products into the United States, and their government attempted to force the concession of this privilege by imposing restrictive regulations on the operations of the United States fishermen. The most important of these regulations had to do with the sale of bait, for which article the fishermen of the United States had long been largely dependent upon the shore fisheries of Newfoundland. In the years just after the termination of the agreement contained in the treaty of 1871, Newfoundland enacted statutes prohibiting the sale, within the juris-

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, IV, 14; V, 1066.
[2] *Ibid.*, I, 200; II, 96.

diction of the colony, of bait, ice, and other supplies to foreign fishermen, unless they obtained special licenses from the Newfoundland Government. In 1890, the Blaine-Bond Convention was negotiated, affecting the relations between the United States and Newfoundland. This convention granted to United States fishermen the right to purchase bait in the waters of Newfoundland on the same terms as were enjoyed by Newfoundland fishermen, and provided for freedom of trade between the United States and Newfoundland in certain products, among which were products of the fisheries. The agreement was not ratified, however, and the license system continued to prevail. In 1893, Newfoundland enacted a law, known as the foreign fishery vessels act, which continued the license system and contained additional regulations providing that no foreign fishing-vessel should, without license, engage any part of its crew within Newfoundland waters.[1] In 1902 the Bond-Hay Convention was negotiated, containing provisions similar to those of the Chamberlain-Bayard agreement, but again the Senate declined to ratify the convention.

In 1905 the Newfoundland Government, intent upon compelling the free admission of Newfoundland fishery products into the United States, took the step of repealing the previous laws regulating the fisheries, and enacted a new law which prohibited altogether the purchase of bait by foreign fishery vessels and the engagement by them of crews within Newfoundland waters.[2] Furthermore, the act authorized certain officers to go aboard any foreign fishing-vessel coming within 3 miles of Newfoundland, and declared that the presence on board any such fishing-vessel of any bait-fish should be considered as *prima facie* evidence of the purchase of such bait-fish within Newfoundland waters, thus depriving the foreign fishermen in whose possession the bait was found of the presumption of innocence to which they were naturally entitled. Since this act applied to the treaty coasts as well as to the non-treaty coasts, the United States Government, contending that under the convention of 1818 the inhabitants of the United States, whose vessels resorted to the treaty coasts for the purpose of exercising the privileges granted by the convention, were also entitled, when duly authorized by the United States, to exercise the commercial privileges accorded to United States trading-vessels generally, lodged a vigorous protest with the British Government ..inst the enforcement of the act. The ensuing diplomatic inter..nges resulted in the establishment in 1906 of a *modus vivendi*, ..ereby the law was suspended for the time being and other arrange..nts effected to enable the United States fishermen to pursue their ..rations on the treaty coasts without undue molestation. This *..dus vivendi* was renewed, with some modifications, in 1907 and in ..8.

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, V, 1234. [2] *Ibid.*, 1284.

ARBITRATION OF NORTH ATLANTIC FISHERIES DISPUTE.

In 1907, Mr. Reid, the United States ambassador to Great Britain, suggested to Sir Edward Grey, the British Secretary of State for Foreign Affairs, that the fisheries controversy be submitted to the Hague Tribunal for arbitration. To this proposition the British Government agreed, and in 1909 a special agreement was concluded providing for the arbitration of the important points at issue.[1] The Court of Arbitration met in 1910, and the following questions were submitted to it for adjudication:

Question 1. To what extent are the following contentions or either of them justified?

It is contended on the part of Great Britain that the exercise of the liberty to take fish referred to in the said article, which the inhabitants of the United States have forever in common with the subjects of His Britannic Majesty, is subject, without the consent of the United States, to reasonable regulation by Great Britain, Canada, or Newfoundland in the form of municipal laws, ordinances, or rules, as, for example, to regulations in respect of (1) the hours, days, or seasons when fish may be taken on the treaty coasts; (2) the method, means, and implements to be used in the taking of fish or in the carrying on of fishing operations on such coasts; (3) any other matters of a similar character relating to fishing; such regulations being reasonable, as being, for instance—

(*a*) Appropriate or necessary for the protection and preservation of such fisheries and the exercise of the rights of British subjects therein and of the liberty which by the said Article I, the inhabitants of the United States have therein in common with British subjects;

(*b*) Desirable on grounds of public order and morals;

(*c*) Equitable and fair as between local fishermen and the inhabitants of the United States exercising the said treaty liberty and not so framed as to give unfairly an advantage to the former over the latter class.

It is contended on the part of the United States that the exercise of such liberty is not subject to limitations or restraints by Great Britain, Canada, or Newfoundland in the form of municipal laws, ordinances, or regulations in respect of (1) the hours, days, or seasons when the inhabitants of the United States may take fish on the treaty coasts, or (2) the method, means, and implements used by them in taking fish or in carrying on fishing operations on such coasts, or (3) any other limitations or restraints of similar character—

(*a*) Unless they are appropriate and necessary for the protection and preservation of the common rights in such fisheries and the exercise thereof; and

(*b*) Unless they are reasonable in themselves and fair as between local fishermen and fishermen coming from the United States, and not so framed as to give an advantage to the former over the latter class; and

(*c*) Unless their appropriateness, necessity, reasonableness, and fairness be determined by the United States and Great Britain by common accord and the United States concurs in their enforcement.

Question 2. Have the inhabitants of the United States, while exercising the liberties referred to in said Article, a right to employ as members of the fishing crews of their vessels persons not inhabitants of the United States?

---

[1] *Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, 26.

Question 3. Can the exercise by the inhabitants of the United States of the liberties referred to in the said Article be subjected, without the consent of the United States, to the requirements of entry or report at customs-houses or the payment of light or harbour or other dues, or to any other similar requirement or condition or exaction?

Question 4. Under the provision of the said Article that the American fishermen shall be admitted to enter certain bays or harbours for shelter, repairs, food, or water, and for no other purpose whatever, but that they shall be under restrictions as may be necessary to prevent their taking, drying, or curing fish therein or in any other manner whatever abusing the privileges thereby reserved to them, is it permissible to impose restrictions making the exercise of such privileges conditional upon the payment of light or harbour or other dues, or entering or reporting at custom-houses or any similar conditions?

Question 5. From where must be measured the "three marine miles of any of the coasts, bays, creeks, or harbours" referred to in the said Article?

Question 6. Have the inhabitants of the United States the liberty under the said Article or otherwise to take fish in the bays, harbours, and creeks on that part of the southern coast of Newfoundland which extends from Cape Ray to Rameau Islands, or on the western and northern coasts of Newfoundland from Cape Ray to Quirpon Islands, or on the Magdalen Islands?

Question 7. Are the inhabitants of the United States whose vessels resort to the treaty coasts for the purpose of exercising the liberties referred to in Article I of the Treaty of 1818 entitled to have for those vessels, when duly authorized by the United States in that behalf, the commercial privileges on the treaty coasts accorded by agreement or otherwise to United States trading vessels generally?

After considering the contentions and views of the two nations, which were presented in printed form, and after hearing oral arguments by counsel, the court, on September 7, 1910, rendered a decision upon all the questions. The decision was almost entirely favorable to the United States Government, its contentions being in no instance completely denied, and in most of the questions fully accepted.

On Question 1, which involved the most important issue, the court decided that the right of Great Britain to make regulations, without the consent of the United States, as to the exercise of the liberties granted in the convention of 1818, was inherent in the sovereignty of Great Britain, but that such regulations must be appropriate or necessary for the protection of the fisheries, desirable or necessary on moral grounds, and equitable as between local and American fishermen. In case of a difference of opinion between the two nations as to the reasonableness of existing regulations, it was decided that the difference should be settled by a commission of expert specialists. In regard to future regulations it was recommended that all laws and ordinances be published at least 2 months before becoming effective, and if the United States Government should consider such laws inconsistent with the treaty of 1818, they should not take effect so far as the fishermen of the United States were concerned until approved by a permanent mixed fishery commission, the method of appointment of which was provided for in the decision.

On Question 2, the court held that inhabitants of the United States possessed the right to employ, as members of their fishing crews, persons not inhabitants of the United States, but that such non-inhabitants should derive no benefit or immunity from the treaty.

On Question 3, the decision was that the regulation requiring American fishing-vessels to report to custom-houses was not unreasonable, unless there was a lack of convenient opportunity to report either in person or by telegraph, but that American fishing-vessels should not be subjected to the purely commercial formalities of reporting and clearing, nor be compelled to pay light or harbor dues not imposed upon Canadian fishermen.

The decision on Question 4 was along the same lines, the court holding that to impose restrictions making the exercise of the privileges granted in Article I of the convention of 1818 conditional upon the payment of light and harbor dues, or entering and reporting at custom-houses, would be inconsistent. However, American fishing-vessels had no right to abuse the privileges which they held, and, if remaining longer than 48 hours in a port which they had entered for any of the four purposes mentioned in the treaty, should be required, if thought necessary by the British or colonial government, to report to a custom-house or a customs official.

Question 5 had to do with the "headlands doctrine," which had caused the first difference over the meaning of the treaty of 1818, and was one of the most important questions coming before the tribunal. The decision on this question was that "in case of bays, the three marine miles are to be measured from a straight line drawn across the body of water where it ceases to have the configuration and characteristics of a bay. At all other places the three marine miles are to be measured following the sinuosities of the coast." In order to render the decision more practicable the tribunal specifically defined the limits of exclusion for a number of bays "where the configuration of the coast and the local climatic conditions are such that foreign fishermen, when within the geographic headlands, might reasonably and bona fide believe themselves on the high seas," and recommended that for all other bays "the limits of exclusion shall be drawn three miles seaward from a straight line across the bay in the part nearest the entrance at the first point where the width does not exceed ten miles."

Question 6 involved a quibble injected into the controversy at a late date at the suggestion of the Newfoundland Government. It represented an attempt to place an entirely new construction on the treaty of 1818. The treaty stated that the inhabitants of the United States should have the "liberty to take fish on that part of the southern *coast* of Newfoundland which extends from Cape Ray to the Rameau Islands, on the Western and Northern *coast* of Newfoundland from the said

Cape Ray to the Quirpon Islands, and also on the *Coasts, Bays, Harbours, and Creeks* from Mount Joly on the Southern Coast of Labrador to and through the Straits of Belleisle, and thence northward indefinitely along the Coast." The Newfoundland Government claimed that the omission of the words "bays, harbors and creeks," in connection with the coasts of Newfoundland and the Magdalen Islands and their use in connection with the coast of Labrador indicated that the American fishermen had no right to fish in the bays, creeks, and harbors of Newfoundland and the Magdalen Islands. Since the American fishermen had always exercised this liberty, the United States Government would have been subjected, in case of a decision favorable to the contention of Newfoundland, to a claim for very large damages for the value of all the fish taken by the United States fishermen in the Newfoundland bays for 90 years. Moreover, in event of such a decision, the United States fishermen would have been excluded from the most valuable and important fisheries of the Newfoundland coast—the bait-fish and the winter-herring fisheries—both of which are carried on wholly within the bays, and Newfoundland would have been in a position, by threatening the entire American cod-fishing industry, to compel the free entry of Newfoundland fish and fish products into the United States. The tribunal was of the opinion, however, that the word "coasts" did not exclude bays, creeks, and harbors, and decided that the United States fishermen were entitled to fish along the entire coast-line of the treaty coasts.

The decision on Question 7, which involved the issue of commercial privileges of the United States fishing-vessels, was also favorable to the United States, the tribunal holding that as far as concerned the treaty there was nothing in its provisions to prevent the United States fishing-vessels from exercising, when duly authorized by their government, the commercial privileges accorded to trading-vessels generally, providing that the treaty liberty of fishing and the commercial privileges were not exercised concurrently.

Thus the important controversy over the meaning of Article I of the convention of 1818 was at length definitely settled, and the misunderstanding, which for nearly a century had been a source of embarrassment to the governments of both the United States and Great Britain, was terminated. That two great nations were able to settle a disagreement in which the issues at stake were of such importance by the method of arbitration was of signal benefit not only to the nations themselves, but also to the world at large in that it afforded a noteworthy example of how international difficulties could be justly and honorably settled in a peaceable manner. To the Hague Tribunal the case gave an added degree of prestige which seemed certain to increase its capacity for future usefulness.

CONTROVERSY OVER THE FUR-SEAL FISHERIES.

The other important international fisheries controversy—that growing out of the attempt of the United States to prevent the destruction of the fur-seal fisheries of Bering Sea by pelagic sealers—had its origin in 1886, when three Canadian sealing-vessels were seized by a United States revenue-cutter, about 60 miles from the nearest land, and later condemned in the Federal court at Sitka for having been "found engaged in killing fur-seals within the limits of Alaska Territory and in the waters thereof in violation of section 1956 of the Revised Statutes of the United States."[1] In the trial of the vessels the court took the position that the United States, at the time of the purchase of Alaska, had acquired full territorial jurisdiction over the Bering Sea east of the one hundred and ninety-third degree of west longitude, and directed the jury to consider that part of the sea as being comprised within the territorial waters of Alaska. The British Government, taking exception to the claim that the United States possessed sovereignty over the Bering Sea beyond the ordinary three-mile limit, protested against the arrest of the Canadian sealers. At the order of President Cleveland, the vessels were released, without, however, any disavowal of the position assumed by the court in its charge to the jury.

In 1887, Mr. Bayard, the Secretary of State of the United States, made an attempt to induce the various countries having interests in the fur-seal fisheries of Bering Sea to enter into a cooperative agreement for the protection of the seals, but because of the opposition of Canada, without whose assent Great Britain could not act, his effort resulted in failure.[2] The depredations of the pelagic sealers continuing to increase, the United States Government renewed its efforts to protect the seal herd, and in 1889 again seized several Canadian vessels engaged in sealing in Bering Sea outside of the three-mile limit.[3] This time, without raising the question of territorial jurisdiction over Bering Sea, the Government of the United States defended the seizures by contending that the vessels taken were engaged in a pursuit that was in itself *contra bonos mores*, and, moreover, asserted that the seals of Pribilof Islands were the property of the United States, the ownership resulting from the possession of the islands and coasts upon which the seals were accustomed to breed and live. To the novel claim of ownership Great Britain naturally protested, and at the same time declared that the United States, unless authorized by an international convention, had no right to maintain police regulations of any sort on Bering Sea.

In the diplomatic controversy which ensued, though placing greatest reliance and emphasis upon the claim of a right to protect a property interest in the fur-seals, the United States Government did not entirely abandon the contention as to territorial jurisdiction over the waters of

[1]Fur Seal Arbitration *Proceedings*, II, 82, Appendix, 115.
[2]*Ibid.*, II, 83.
[3]*Ibid.*, II, Appendix, 168 *et seq.*

Bering Sea. Though specifically disclaiming any intention of demanding that the sea be considered a *mare clausum*, Secretary of State Blaine asserted that the United States possessed sufficient authority for exercising the jurisdiction necessary for the protection of the seal herd. The Russian Government had assumed jurisdiction over Bering Sea in 1821, when Czar Alexander issued an ukase, in which he granted exlusively to his subjects the rights to trade and fish on all islands, ports, and gulfs, including the whole northwest coast of America, north of the fifty-first parallel of north latitude, and forbade all foreign vessels to land on these coasts and islands or even to approach them within a distance of 100 miles. Against the pretensions contained in this edict, the governments of both the United States and Great Britain entered protests, and, as a result, each nation, the United States in 1824 and Great Britain in 1825, secured a treaty in which Russia abandoned the claim to exclusive jurisdiction and agreed that in any part of the Pacific Ocean the citizens and subjects of the United States and Great Britain should not be disturbed in navigation, fishing, or trading with the natives at points along the coast not occupied by Russia. In the fur-seal controversy with Great Britain, the United States Government contended that in the renunciation of the claim to sovereignty over the Pacific Ocean, Russia had not given up jurisdiction over the fur-seal fisheries of Bering Sea, the latter body of water not being included in the phrase *Pacific Ocean*, as used in the treaties of 1824 and 1825. Consequently, when Russia ceded Alaska to the United States in 1867, jurisdiction over the fur-seal fisheries, which it was contended Russia had exercised continuously and without opposition after 1799, was transferred to the United States.

As the controversy developed the diplomatic interchanges resulted, in June 1891, in a temporary understanding by which Great Britain undertook to prohibit, until the following May, the killing of fur-seals by British subjects in that part of Bering Sea east of the line of demarcation described in the treaty of 1867 between the United States and Russia; and the United States Government agreed to limit the killing of seals by citizens of the United States to a number necessary for the maintenance of the natives of the Pribilof Islands. Early in 1892 both countries agreed to arbitrate the entire dispute, and pending the decision of an arbitration tribunal, the *modus vivendi* of 1891, with a few modifications, was continued.

The arbitration court, consisting of seven distinguished jurists, met in Paris in 1893. Five points involving the question of the jurisdiction of the United States over the fur seals in Bering Sea were submitted to the tribunal, and a provision was made that, in case the decision on the five questions was adverse to the contentions of the United States, the tribunal should prescribe concurrent regulations for the protection of the seals outside the jurisdictional limits of both the United States and

Great Britain. The five points relating to the jurisdiction of the United States were as follows:[1]

1. What exclusive jurisdiction in the sea now known as the Bering's Sea, and what exclusive rights in the seal fisheries therein, did Russia assert and exercise prior and up to the time of the cession of Alaska to the United States?

2. How far were these claims of jurisdiction as to the seal fisheries recognized and conceded by Great Britain?

3. Was the body of water now known as the Bering's Sea included in the phrase *Pacific Ocean*, as used in the treaty of 1825 between Great Britain and Russia; and what rights, if any, in the Bering's Sea were held and exclusively exercised by Russia after said treaty?

4. Did not all the rights of Russia as to jurisdiction and as to the seal fisheries in Bering's Sea east of the water boundary, in the Treaty between the United States and Russia of the 30th of March, 1867, pass unimpaired to the United States under that Treaty?

5. Has the United States any right, and if so, what right of protection or property in the fur-seals frequenting the islands of the United States in Bering Sea when such seals are found outside the ordinary three-mile limit?

The award of the arbitrators was throughout adverse to the contentions of the United States Government.[2] The court decided that Russia had never exercised an exclusive jurisdiction in Bering Sea or any exclusive rights in the seal fisheries beyond the ordinary limit of territorial waters, and that the United States possessed no right of protection or property in the fur seals frequenting Bering Sea, when the seals were found outside of the three-mile limit. As provided for in event of a decision of this nature, the arbitrators established a system of regulations for the protection of the seals outside territorial limits, to be enforced jointly by the two nations against the citizens and subjects of either. By these regulations pelagic sealing was to be suspended during May, June, and July throughout Bering Sea, and to be suspended permanently within a zone of 60 geographical miles around the Pribilof Islands. Only licensed vessels were to be allowed to engage in sealing, and the use of nets, firearms, and explosives in taking seals in Bering Sea was forbidden.

Both Great Britain and the United States enacted laws providing for the execution of these concurrent regulations, and the United States Government enacted a statute prohibiting its citizens from engaging in pelagic sealing in Bering Sea at any time. Notwithstanding these regulations, however, the fur-seal herd continued to dwindle. It was found that the closed zone of 60 miles did not afford adequate protection even from Canadian sealers, because the female seals having young dependent upon them fed outside of the protected area, and furthermore, Japanese sealers, many of whom sailed Canadian vessels transferred to the Japanese flag, not being bound by the regulations established by the arbitration tribunal, killed thousands of seals just outside the three-mile limit of the Pribilof Islands. So rapidly did the seal herd decline, that in 1896 the governments of Great Britain and

---

[1] Fur Seal Arbitration *Proceedings*, I, 76. [2] *Ibid.*, I, 75–80.

the United States appointed a joint commission to study the fur-seal life of Bering Sea, endeavor to find out the exact cause of the decrease of the number of seals, and suggest some method for greater protection. The conclusion of the commission was that the decimation of the herd was due almost solely to the killing of female seals at sea, and that the preservation of the seal fishery could be accomplished only by the abolition of pelagic sealing.

Notwithstanding the report of the commission, nothing was done for several years to secure more effective protection of the seals, and the herd gradually came nearer and nearer to the point of total extinction.

Finally in May 1911, an international conference of representatives from the United States, Great Britain, Russia, and Japan, the four nations having sealing interests in the north Pacific Ocean, met at Washington for the purpose of effecting an agreement by which the fur-seal fishery could be preserved. After deliberations lasting almost two months, the members of the conference signed a treaty under the terms of which the four powers agreed to prohibit their citizens or subjects from engaging for a period of 15 years in pelagic sealing in the waters of the Pacific Ocean north of the thirtieth parallel of north latitude, including the seas of Bering, Kamchatka, Okhotsk, and Japan.[1] As a compensation for the losses of the pelagic sealing interests, the United States agreed to give to Great Britain and Japan each 15 per cent of the seal skins taken yearly on the Pribilof Islands; Russia made similar provisions with regard to the seals killed on the Commander Islands; and Japan agreed to give to each of the other nations 10 per cent of the seal skins obtained on Robben Reef and the Kuril Islands. The treaty also provided that the United States should pay Great Britain and Japan each $200,000, to be credited in lieu of seal skins due, and that if no seals were taken on the Pribilof Islands in any year in which the herd numbered 100,000 or more, the United States should make a payment of $10,000 to each of these two nations. The treaty was ratified by the Senate on July 24, 1911, and became effective December 15, 1911. Under the terms of the first article, every person and vessel engaging in pelagic sealing within the interdicted area may be seized, except in territorial waters, by the naval vessels of any one of the four powers, but must be delivered to the officials of their own nation, which shall have jurisdiction to try the offense.

With the coming into effect of this convention, pelagic sealing in the North Pacific Ocean was terminated, and for a time at least the problem of the preservation of the seal herd has been solved. As a further measure of protection, the United States Congress, in passing the act to give effect to the treaty, included a provision for the establishment of a five-year closed season on the Pribilof Islands, limiting the killing of seals there to a number sufficient for food for the natives. The good effects of the protection now accorded the seal herd have been described in a previous chapter.

[1] Charles, *Treaties, Conventions, etc., between the United States and other Powers*, 84.

PART THREE

GOVERNMENT AID AND COMMERCIAL POLICY

By D. S. HANCHETT

CHAPTER XXXVII.

THE MACHINERY OF FEDERAL REGULATION OF COMMERCE.

Regulation of commerce before 1789, 241. The commerce clause of the Constitution, 242. Powers of the President regarding commerce, 243. Commercial functions of Department of State, 244. The Department of War, 245. Department of the Treasury, 246. The customs service, 246. Revenue cutter service, 248. Life-saving service, 249. Marine Hospital, 249. Bureau of Public Health, 250. Quarantine service, 250. The Post Office Department, 251. Department of Justice, 251. Department of the Navy, 252. Hydrographic Office, 252. Department of the Interior, 253. The Department of Agriculture and the Weather Bureau, 254. Department of Commerce: the lighthouse service, 255; the Bureau of the Census, 256; the Coast and Geodetic Survey, 257; the Bureau of Foreign and Domestic Commerce, 258; the Bureau of Standards, 260; Steamboat-Inspection Service, 261; the Bureau of Navigation, 262; the Bureau of Corporations, 263. Department of Labor, 263. Independent governmental and international agencies, 264. The judiciary and legislative agencies, 265.

From the earliest days of its history the United States Government has been active in the control and regulation of commerce. Before the outbreak of the Revolutionary War the American colonists were accustomed to the regulation of commercial matters by the British Government, and it is not surprising that, when independence was declared, the Continental Congress should have proceeded to regulate trade matters. While it possessed no authority to do so, its action was nevertheless respected by the several States during the revolutionary crisis. As early as 1775 the Continental Congress opened American ports to the ships of all countries, prohibited the slave trade, and assumed the management of the post-office. The first treaty of commerce (with France) providing for reciprocal trade was negotiated along with the treaty of alliance in 1778. But these *de facto* powers did not become *de jure* at once. The colonists had not entirely learned the lesson of cooperation. The Articles of Confederation, adopted by Congress in 1777, and ratified by all of the States by 1781, gave Congress no power to make commercial regulations.

The various State governments not only placed varying restrictions upon foreign trade, but often imposed burdensome duties on interstate traffic as well, and retaliation—commercial war in fact—was the result. Effective regulation of trade under the Articles of Confederation was impossible, and furthermore, individual States obstinately prevented the adoption of several amendments to the Articles which were then brought forward with a view to conferring upon Congress a certain degree of regulative power.

The unfortunate commercial situation was the chief reason for the change in the form of government effected by the adoption of the Federal Constitution in 1789. Of the various powers conferred by that instrument on the Federal authorities none were more important than

those relating to the control of domestic and foreign trade, and to the various institutions with which the operations of commerce are closely related. Among all the influences which contributed to the economic prosperity of the Republic during the early years of its existence, none was more potent than the system of commercial regulation, the adoption of which was made possible by the Constitution.

The commerce clause, Article I, section 8, of the Constitution, provides that "the Congress shall have Power . . . to regulate Commerce with foreign Nations, and among the several States and with the Indian Tribes." Additional clauses of the same article and section grant to Congress the power "to lay and collect taxes, duties, imposts and excises, to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts and excises shall be uniform throughout the United States;" and "to make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the Government of the United States, or in any department, or officer thereof." The power thus conferred has from time to time been broadly construed by the Supreme Court, and as a consequence the activities of the Federal Government in the regulation of foreign and domestic trade have constantly increased.

Commerce has so many phases and touches so many sides of national life, that it would be impossible to place under a single officer or even in a single department all the governmental functions relating to it. Each of the three great branches of the Federal Government, the executive, the legislative, and the judicial, has a part in the regulation of trade. The President and the various executive departments immediately under him, the Federal Congress, with its permanent and special committees, and the Federal courts, from the beginning, had commercial functions to perform, and with the rapid increase in the volume and complexity of the trade of the nation and with the steady growth of Federal control, the machinery for the regulation of commerce became more elaborate and complex. In 1903 it was found advisable by Congress to create a new executive department, the Department of Commerce and Labor, under the jurisdiction of which was placed a large number of bureaus, boards, offices, and services which had formerly been attached to other executive departments. In 1913 this policy of segregation of work in department matters relating to commerce was further carried out by creating a Department of Labor separate from the Department of Commerce. It must not be supposed, however, that all of the governmental services which relate to this field have been placed under the Secretary of Commerce. All of the executive departments, as well as Congress and certain Federal courts, exercise commercial functions, and there is a large number of subordinate bureaus and offices which have a part in the work of aiding and regu-

lating the interstate and foreign trade of the nation. It is the purpose of this chapter to give briefly the history of the administrative regulation of commerce by the various divisions of the Federal Governmental machinery.[1]

POWERS OF THE PRESIDENT REGARDING COMMERCE.

At the head of the executive branch of the government stands the President of the United States. His influence upon commerce is exerted in numerous ways, his appointing power being first in importance. Upon the character of the men whom he selects for such offices as Secretary of Commerce or Interstate Commerce Commissioner depends in large measure the efficiency of governmental control of commerce. While, indeed, appointments are made "by and with the advice and consent of the Senate," in practice the President is but little restricted by the Senate in naming men to fill cabinet positions. Furthermore, by virtue of his power of removal, of the broad powers of direction which he exercises over the work of the executive departments, and by means of his ordinance power, the President exerts great authority over the machinery of regulation. A recent example of the exercise of the ordinance power will serve to illustrate its importance. On November 13, 1912, President Taft by proclamation established the tolls which are to be levied on ships passing through the Panama Canal, and on November 21, 1913, President Wilson fixed the rules for determining the tonnage upon which vessels shall pay the tolls that are levied, thereby affecting the commerce, not only of the United States, but of the world, to the extent of determining the conditions under which the Panama Canal may be used.

Another and very specific way by which the power of the President is exercised over commerce is through his special authority over foreign relations. The Secretary of State gives to diplomatic relations his special attention, but upon the President personally depends in large measure the success of negotiations with other powers as regards commercial privileges, and the rights of aliens in trade with and in the United States.[2]

While the treaty-making power is exercised by the President, by and with the advice and consent of the Senate, he is obliged to respect the power of Congress over commerce, and must observe in commercial treaties the policies established by the laws of Congress. Conflicts have arisen with respect to the power of the President and Congress in relation to commercial treaties, but the Supreme Court has declared[3]

[1] It will be noticed that much of the language used in this part of this volume is in the present tense. In giving a history of the agencies of government for the regulation of commerce it seems advisable, and, indeed, almost necessary, to state what the commercial functions of the several departments and bureaus now are and to state when and how those powers and duties concerning commerce were conferred upon the existing agencies of the government. "Present" conditions are those of 1913.

[2] Fairlie, *The National Administration of the U. S., of America*, 29.

[3] United States vs. Lee Yen Tai, 185 U. S. 213.

that "as Congress may by statute abrogate, so far at least as this country is concerned, a treaty previously made by the United States with another nation, so the United States may by treaty supersede a prior act of Congress on the same subject." The act or treaty which bears the most recent date is controlling, and the President may therefore, in effect, if he can secure the consent of the Senate, supersede Congressional action by the negotiation of commercial (or other) treaties.

The President, acting through the State Department, prepares the formal draft of a treaty and then seeks the "advice and consent," that is the ratification, of the Senate. The difficulty of securing the approval of two-thirds of the Senators present has sometimes required the negotiation of a new treaty or the acceptance by the countries parties to the treaty of amendments proposed by the Senate as conditions precedent to favorable action. The Senate's rejection of, or failure to accept, a treaty has given rise to some of the "executive agreements" which the President has made with foreign countries. President Roosevelt's agreement with Santo Domingo in 1905, whereby the supervision of Dominican finances was undertaken by American citizens, arrangements were made for paying the foreign debt, and American battleships were sent to the island, followed the refusal by the Senate to ratify a treaty the chief terms of which were those embodied in the executive agreement.

The use by the President of his military powers to keep open the channels of interstate commerce during strikes and riots makes him the ultimate authority to whom appeal must be made in times of crisis to keep the machinery of commerce going. The President is, in fact, the supreme director, while the ten great administrative departments, at the head of each of which is a Cabinet officer of his selection, comprise in large part the mechanism through which he acts.

COMMERCIAL FUNTIONS OF THE DEPARTMENT OF STATE.

Logically, it might seem better to consider the commercial functions of the ten departments by beginning with the Department of Commerce, to which is now intrusted the fulfillment of most of the functions under consideration. In order, however, to show more effectively the historical growth of the administrative bodies dealing with commerce, the departments will be considered chronologically.[1]

The Department of Foreign Affairs was created by Congress July 27, 1789, and on September 15 following the present title was adopted. The department was the successor of the Department of Foreign Affairs, created in 1781 to handle matters which had, since 1775, been delegated to committees of Congress.[2] The early functions of the

[1] *History of the Department of State of the United States*, 1901, 14.
[2] *Checklist of United States Public Documents, 1789–1909*, p. 891.

State Department were more comprehensive than they are now. The Secretary of State was originally at the head of the Patent Office, and his department had control of the census, and although both of these offices, which bear important relations to commerce, have been transferred to other departments, the State Department still exercises commercial functions of great importance. Foreign relations, the supervision of which was the primary purpose for which this oldest one of the executive departments was organized, have always been handled by it through the diplomatic serivce, which, in 1913, included 157 officers who represented the United States in 48 countries. The Secretary of State and the diplomatic representatives abroad have large commercial responsibilities, for it is through them that commercial treaties are negotiated and the rights existing by virtue of those treaties are enforced. The general functions of the service were stated as follows by Frederick T. Frelinghuysen, Secretary of State under President Arthur:

"The diplomatic officer does for the nation what the consular officer does for the citizen. Speaking generally, the consul aids the individual and protects separate interests, while the minister acts for the nation and guards its general political and commercial welfare."[1]

With the details of commercial affairs the diplomat is not usually concerned, but one of his chief duties is to cooperate with consular officers in promoting American commerce, agriculture, and manufactures. The consular service is fully considered in the following chapter. The Bureau of Citizenship supplements the work of the foreign service by issuing passports, examining certificates of the registration of American citizens in consulates, authenticating documents for use abroad, and furnishing to citizens letters of introduction to members of the foreign service. Lists of American diplomatic and consular officers are furnished to interested parties by the Bureau of Appointments.[2]

THE DEPARTMENT OF WAR.

The second of the executive departments was established August 7, 1789, eleven days after the creation of the Department of Foreign Affairs. Its chief commercial function is the improvement of rivers and harbors, and the magnitude of its operations in this work will appear in the consideration of that subject in Chapter XL.

The War Department and the Secretary of War, acting through the Bureau of Insular Affairs and the Corps of Engineers, have important duties in the outlying territories of the United States. The Canal Zone in Panama was administered by the Secretary of War, through the Isthmian Canal Commission, from 1904 to 1914, when it was placed

---

[1]Exec. Doc. No. 146, 48 Cong., 1 sess., p. 1.
[2]*Congressional Directory, 63 Cong., 3 sess.*, 292.

under the governor of the Panama Canal, who is subordinate to the Secretary of War. To the Bureau of Insular Affairs, established in 1898 as a "division" and made a bureau in 1902, under the immediate control of the Secretary, is assigned all matters pertaining to insular civil government. Among the commercial functions of the bureau is the gathering and publication quarterly of statistics of insular exports and imports, shipping, and immigration. Porto Rico was granted civil government by the act of April 12, 1900, and until June 30, 1908, its governor, who is appointed by the President of the United States, was required to report to the State Department. Thereafter jurisdiction was vested in the War Department. Various measures of commercial assistance, including the improvement of San Juan harbor, have been prosecuted by the United States. Civil government was established in the Philippines by the act of July 1, 1902, and the islands are governed by a commission which was organized in 1904 and is subject to the Secretary of War.

THE DEPARTMENT OF THE TREASURY.

The Treasury Department is vitally concerned with commerce, which it aids and regulates through five different agencies—the Customs Service, the Revenue Cutter Service, the Commissioner of Internal Revenue, the Life-Saving Service, and the Bureau of Public Health.

In the constitutional convention, upon the initiative of Gouverneur Morris, an effort was made to designate the chief officer of the department as the "Secretary of Commerce and Finance."[1] Although this was not the title adopted, the Treasury Department nevertheless had, from the beginning, a very considerable supervision over commerce, and before the establishment of the Department of Commerce and Labor, in 1903, it was the most intimately concerned with commerce of all of the executive departments. Its former primacy in this respect is apparent when it is remembered that, in addition to the services which it still performs, the department in 1903 also included the Lighthouse Board, the Coast and Geodetic Survey, the Steamboat-Inspection Service, the Bureau of Navigation, the Bureau of Immigration, the Bureau of Statistics, and the Bureau of Standards. All of these bureaus and services were then transferred to the new Department of Commerce and Labor, but the Treasury Department nevertheless retained many important duties respecting the regulation of commerce.

Important commercial functions are exercised by the Customs Service, which, as one of the first necessities of government, was established by the act of September 2, 1789, in the Treasury Department, where it has remained. From 1849 to 1894 there was a Commissioner of Customs, whose functions were rather those of an auditor than of an administrative officer, and whose office was discontinued when

[1] *Organization and Law of the Department of Commerce and Labor*, 8.

the auditing service was reorganized. The general supervision of the service and of the Division of Customs, which was organized about 1870 to attend to administrative duties, is vested in the Assistant Secretary of the Treasury in charge of customs. An organization grew up which, in course of time, embraced a superabundance of offices and officers whose salaries were not adjusted to the demands made upon them. Finally, pursuant to the act of August 24, 1912, a reorganization was effected, designed to accommodate the machinery of collection to altered trade conditions. The 126 collection districts previously in existence were reduced in number to 49, and the designations "sub-port of entry" and "port of delivery" were abolished, "port of entry" being the only classification retained. A collector of customs has general supervision of each district, and a collector of the port has charge of each port.

The functions of the service pertain to the entry of ships from foreign ports, the levying of customs duties following an appraisal of imported goods, the hearing of appeals respecting appraisals, the departure of ships from port, and the enforcement of various navigation laws. Permission to discharge cargo is given to the master only after a sworn copy of the ship's manifest has been filed with the port collector, together with the clearance papers and register or a consul's receipt therefor. The tonnage tax, levied on all ships arriving from foreign ports, is then collected. A customs officer supervises the process of unloading. Consignees enter goods at the custom-house by presenting sworn invoices from the consignor or owner, and the goods are, moreover, appraised by examiners, appraisers, and assistant appraisers, and at the smaller ports by collectors themselves. In practice most of the work is done by individual examiners, upon whose knowledge and judgment depends the accuracy of the appraisal, inasmuch as the appraisers themselves are unable, at the more important ports, to review effectively the work of their subordinates.

Although admittedly inadequate, this appraisal assists in the detection of frauds. Appeal from it lies to the Board of General Appraisers, appointed by the President, which was a branch of the Treasury Department until 1909, since when it has been quasi-independent. The headquarters of the board are in New York, where two-thirds of the work is done. It serves as a reviewing board, with some functions analogous to those of a court. Appeal from its decisions lies to the United States Court of Customs Appeals.

When the appraisal has been completed, the customs duties are levied. Since the institution in 1846 of bonded warehouses, it has no longer been necessary to collect duties or to insure their collection before goods are landed, but the importer may, if he chooses, store the goods in a Government warehouse or in a private warehouse supervised by customs officers. After the outgoing cargo has been loaded and the

ship is ready to depart, its register is obtained, and a bill of health, certifying to the health conditions of the port, together with clearance papers, are secured from the collector. A ship from abroad is thus kept under the supervision of the customs service during the entire length of its stay in port. From the records of arrivals and clearances, and from the copies of ships' manifests filed with him, the collector compiles foreign trade and tonnage statistics which are published by a bureau in the Department of Commerce.

Customs officers also document ships flying the American flag; keep records of crew lists of departing ships; receive passenger lists of arriving ships; record bills of sale and mortgages of vessels; enforce the steamboat-inspection laws; and, where there is no shipping commissioner, carry out his duties with respect to the shipping of seamen.

In the collection of import duties the Customs Service is assisted by the Secret Service and the Revenue Cutter Service, which are likewise organized under the Treasury Department. The Secret Service, which was established in 1861, in the State Department, was transferred in 1865 to the Treasury Department, of which it has since been a division. Its work was formerly confined chiefly to the prevention of counterfeiting, but in 1911–12 its duties were increased, and it now cooperates with the Division of Special Agents maintained by the Treasury Department for the purpose of detecting customs frauds.

The Revenue Cutter Service, established in 1790, was known as the Revenue Marine Service until 1894. It is organized as a division in the Treasury Department, and does for the Customs Service on the sea what the Secret Service does for it on land. The officers of its revenue-cutters board inbound vessels from foreign ports, examine their papers, and indorse the manifests covering their cargoes. Besides aiding generally in the enforcement of the revenue laws, the service exercises many other functions. It cooperates with the Department of Commerce in enforcing the navigation and motor-boat laws, requires strict observance of the laws governing the anchorage and movement of vessels in port, enforces the quarantine and immigration laws, and suppresses mutiny aboard merchant vessels. The major part of the actual work of the service is of an emergency nature. It is called upon to assist vessels in distress, to remove derelicts from the ocean, and to save lives at sea. Its officers aid the life-saving corps by instructing, drilling, and inspecting crews and constructing stations. The wireless equipment of the revenue-cutters enables them to assist in the protection of life and property at sea.

Existing arrangements for the collection of internal revenue date from 1862, when the Civil War necessitated the reestablishment of taxes of this nature, which had not been collected at all since 1848. The Commissioner of Internal Revenue, who is at the head of the bureau of the same designation, superintends the enforcement of the

internal-revenue laws and the collection of the taxes. Inasmuch as the collection of these taxes ordinarily requires very little work, the chief duties of the internal-revenue forces are those of inspection. Until 1909 the activities of the bureau were confined to taxes levied on certain specified documents and articles of commerce. The special excise tax on corporations, authorized by Congress in that year, extended the field of operations materially, and the duties of the bureau were further increased and its collections vastly augmented in 1913, when the collection of the income tax, authorized by amendment of the Constitution, was made a duty of the bureau.

Life-saving stations were first established by the Federal Government in 1874, under the direction of the Revenue Marine Service, which had, however, previously been carrying on for a long time the work of life-saving at sea. In 1878, the Life-Saving Service was separately organized as a division in the Treasury Department, where it still remains, under the supervision of a general superintendent. The keepers and surfmen at the 284 stations maintained by the service keep a strict watch, patrol the coasts at night, warn ships of impending danger, rescue lives, and save property threatened with loss at sea. Valuable statistical reports are compiled showing marine casualties, not only within the field of operations of the service, but throughout the entire world. Miscellaneous minor services, such as the recovery of missing buoys and the relighting of extinguished beacons, are rendered.

Great modifications in the equipment of the service have made its work more effective. In 1912 there were in use 109 power life-boats and surf-boats, which not only increased the efficiency but extended the scope of the service. More disasters were brought within reach and many more rescues were reported than in the years prior to 1908, when power-boats were little used. The service operates nearly 1,500 miles of telephone lines, connecting with public telephones and wireless stations, so that it keeps in close touch with the Weather Bureau and with commercial centers. Facilities are thus provided for displaying promptly storm-warning signals and for furnishing to ship-owners and others information concerning vessels endangered by storms along the coast. In the 1,730 disasters reported to have occurred within the limits of operations in 1912, only 59 vessels were lost. The property saved, including vessels and cargoes, was valued at $11,155,170.

National supervision of health matters is exercised through the Treasury Department, under the control of which the Marine Hospital of the United States was established in 1798. The purpose then aimed to be subserved was merely the provision of medical attention for sick and disabled seamen in the merchant marine. However, considerations of expediency caused a constantly growing emphasis to be placed on matters relating to the public health, and many new functions

were from time to time intrusted to the service. In 1902 the designation "Public Health and Marine Hospital Service" was adopted, and finally, in 1912, the designation "Bureau of Public Health" was applied and an organization effected designed to deal with the health of the nation in its broadest sense. The past and present services rendered by this branch of the department are best treated by a consideration of the work of its various divisions.

The Division of Marine Hospitals and Relief maintains 146 establishments, where medical care is given to the officers and crews of American vessels, as well as to government employes in various marine services, and conducts examinations for the detection of color-blindness in ship's officers. The work of this division embodies the earliest functions of the service.

Through the Division of Foreign and Insular Quarantine and Immigration, a service of ever-increasing importance is rendered. Although quarantine matters were originally left to the States, as early as 1796 and 1799 Federal legislation directed certain officials, such as port collectors and revenue-cutter officers, to assist in the execution of State legislation. The cooperation of the consular service was secured at an early date through reports on the existence of disease abroad and on the sailing of vessels bound from infected ports to the United States.

Federal interest in quarantine matters was, however, slight until in the late seventies, when a serious yellow-fever epidemic in the South led to an agitation for a national quarantine system. In 1878 the Secretary of the Treasury was authorized to establish a quarantine at ports where no State or municipal establishments existed. The following year a National Board of Health was established with authority to promulgate national quarantine regulations, which, if State authorities were unwilling to enforce, were to be carried out by Federal officers specially designated for the purpose. Another crisis came in 1893, when an epidemic of Asiatic cholera in European ports, whence emigrants sailed to the United States, led to the establishment of a more effective supervision. The National Board of Health was abolished, and control over quarantine vested in the Marine Hospital Service, and the strict supervision of the surgeon-general has since brought about the conformity of the State regulations with Federal regulations. Annual conferences of State and National health officials assist in securing uniformity of administration. In 1879 the National Board of Health was authorized to build temporary quarantine stations, which were made permanent in 1888. New stations have been authorized from time to time, until the service now maintains a total of 47 in the continental United States and 24 in outlying possessions.

Medical officers are stationed at fourteen American consulates to prevent the introduction into the United States of epidemic diseases. The Division of Foreign and Insular Quarantine and Immigration has

charge of the examination of arriving aliens, and, at the request of the Department of Labor, which supervises immigration, may require quarantine officers stationed at Italian consulates to inspect emigrants departing for the United States. Large immigrant hospitals are maintained at New York and San Francisco.

Interstate commerce is subject to the rules of the Division of Domestic (interstate) Quarantine, which is charged with preventing the spread of contagious or infectious diseases from one State or Territory into another.

THE POST-OFFICE DEPARTMENT.

When temporarily established in 1789, the post-office was considered a part of the Treasury Department, but in 1792 it was permanently established as the General Post Office. Although in 1829 the Postmaster-General was admitted to the Cabinet, it was not until 1872 that the post-office was recognized by Congress as an executive department. Aside from its indispensable function of supplying a prompt and safe mail service, it has secured for commerce greater security with respect to means of transporation than would otherwise have been enjoyed, through the insistence on the prompt movement of trains following the designation by Congress, in 1838, of every railroad in the United States as a post-route. Through the establishment of mail subsidies, which are discussed in Chapter XXXIX, improvements in ocean transportation services have been effected. Moreover, by itself becoming a carrier of parcels, first in 1890 through the international, and, in 1913, through the domestic parcel post, the Post Office Department has facilitated the movement of commerce. Experiments in rural free delivery, begun under the law of 1890, resulted in a rapid extension of this service after 1897. The postal savings system, established in 1911, had, within one and a half years, deposits amounting approximately to $28,000,000, which, in the opinion of the Postmaster General, represented "hoarded money that is restored to the channels of trade." Post-office money-orders and the registered-mail service are both great commercial conveniences.

THE DEPARTMENT OF JUSTICE.

Although the Attorney General's office was established September 24, 1789, and the Attorney General was from the outset admitted to the Cabinet, the Department of Justice was not recognized as an executive department until 1870. Engaged, as the department is, in aiding the executive and judicial departments of the Federal Government in the enforcement of law, its duties have always extended to all the concerns of national life. Certain of the Department officers are specifically concerned with commercial matters. The solicitor for the Department of Commerce, for instance, acts as legal adviser to the Secretary of

Commerce and the bureau chiefs; the Assistant Attorney General, Customs Division, represents the Government in all cases involving reappraisement and classification of imported goods; the Solicitor of Internal Revenue is the legal adviser of the Commissioner of Internal Revenue, and an Assistant to the Attorney General has special charge of all questions arising under the anti-trust and interstate-commerce laws.

THE DEPARTMENT OF THE NAVY.

Naval affairs were first administered under the jurisdiction of the War Department, but on April 30, 1798, a separate department was created. A brief account of the growth of the Navy is given in Chapter XXXIX. Both in time of war and of peace the Navy and the Marine Corps are constantly called upon to protect American interests in one part of the world or another. The account of the movements of individual warships, contained in the Secretary's annual reports, indicates the wide scope and great utility of this service.[1] Moreover, by placing with American ship-builders orders for war vessels, the department requires the installation of improved equipment at the shipyards and facilitates the development of skilled workmen, whereby American establishments are placed more nearly upon a competitive basis in the construction of ships of all kinds.

The Bureau of Navigation of the Navy Department has charge of the naval wireless equipment, which in 1912 included 41 shore and 6 light-vessel stations. Several naval and military stations were in that year opened for the transmission and receipt of commercial radiograms, and others were made available in the case of a lack of private facilities.

The Hydrographic Office, which was originally established in 1842 as an independent bureau in conjunction with the United States Naval Observatory, has been a part of the Bureau of Navigation since 1866. It is charged with improving the means of safe navigation, both for vessels of the Navy and of the merchant marine, by providing accurate nautical charts, sailing directions, and manuals of instruction. Much of the information contained in its periodical publications is of such importance to mariners that it is "sent broadcast by radio," so that all vessels within reach may get it at once. Monthly charts and weekly bulletins covering the North Atlantic, monthly charts of the North Pacific, and less frequent charts of other oceans are published. These charts locate both fixed and temporary dangers to navigation, indicate the usual paths followed by storms at particular periods, the relative amounts of fog which may be met, the direction and force of prevailing winds, the direction of ocean currents, the variation of the magnetic needle, and the courses to be followed in crossing the ocean. These "steamship lanes" were originally suggested by Lieutenant M. F.

[1] *Annual Report Navy Department, 1910*, pp. 57-118.

Maury, of the United States Navy, for routes between northern Europe and the United States, but until 1891 there was no agreement to follow them. In that year five companies, and in 1898 all companies, concerned in trans-Atlantic service agreed to do so. The office has also played an important part in inducing the steamship lines to change their courses during ice seasons in order to avoid danger. Ice reports are sent out over the ocean by wireless, and in 1912, following the *Titanic* disaster, a cruiser was detailed for ice-patrol duty in the North Atlantic. The Secretary of the Navy found it impracticable to detail a vessel for this work in 1913, but the Secretary of the Treasury placed two revenue cutters in this service.

The Naval Observatory, which grew out of the Department of Charts and Instruments, established in 1830, is separately organized, although its connection with the Hydrographic Office is so close that their consolidation has been urged. The Observatory publishes the *American Ephemeris and Nautical Almanac*, containing astronomical information for the guidance of vessels; determines the relative merits of navigation instruments, and establishes standard time and differences of longitude.

THE DEPARTMENT OF THE INTERIOR.

The Department of the Interior, which was created in 1849 to relieve other executive branches of the administration of burdensome affairs not closely related to their normal functions, and to provide means for the exercise of those neglected functions which relate more particularly to the arts of peace, has little direct connection with commerce. The inconsequential commerce with the Indians, which under the Constitution is to be regulated by the Federal Government, is supervised by the Indian Service. With the development of the railway service the department has been concerned, through the Commissioner of the General Land Office, who determines whether railroads have complied with the requirements of Congressional grants. From 1878 to 1904, an officer, first known as Auditor of Railroad Accounts, and later as Commissioner of Railroads, reported on the physical and financial conditions of companies receiving Government aid in lands or bonds, enforced the laws relating to such companies, examined their books, aided the Government directors appointed to their boards, and furnished information concerning their tariffs and accounts. His duties were transferred, in 1904, to the Lands and Railroads Division, and in 1907 to the General Land Office. The Interstate Commerce Commission was, for two years following its creation in 1887, required to submit an annual report to the Secretary of the Interior, who provided quarters for it, and passed upon its accounts and the appointment of its employes. At his own request the Secretary was relieved of these supervisory powers.

The rather nominal authority which the Secretary of the Interior possesses over the Territories, Alaska and Hawaii, affords him an opportunity to exercise an influence over their commerce. His authority consists largely in the receipt of reports from the governors and in the making of recommendations for legislation.

THE DEPARTMENT OF AGRICULTURE.

The Department of Agriculture was established in 1889 as the natural outgrowth of the agricultural activities of the Government, which began in 1836 with the distribution of seeds and plants by the Commissioner of Patents, and, in 1862, developed into a so-called "Department of Agriculture," which was in reality a detached bureau with a commissioner in charge.

Important commercial functions are exercised by one of its subdivisions, the Weather Bureau, which was established in 1890. Before that year, however, a part of the work now done by this bureau was accomplished by other agencies. As early as 1863 the Department of Agriculture published meteorological data compiled by the Smithsonian Institution, and upon the recommendation of the department's commissioner regular weather reports were inaugurated in 1870, when the Chief Signal Officer of the Army was authorized to give storm-warnings and to take meteorological observations. Since the organization of the Weather Bureau its duties have increased until they have attained a surprising variety, and its operations have extended into all parts of the world. Concisely stated, the activities of the Weather Bureau are these: It forecasts the weather; issues and displays its forecasts, together with storm, cold-wave, frost, and flood warnings; gages and reports the height of water in rivers; transmits marine intelligence over its telephone and telegraph lines and otherwise; reports actual temperature and rainfall conditions; conducts investigations in climatology and evaporation and makes and distributes meteorological observations. The weekly forecasts issued at Washington for the weather for a week in advance are prepared on the basis of regular cable and wireless reports from all over the northern hemisphere. Warnings of approaching storms were, in 1912, received from vessels sailing along the various coasts, and from eight special observing stations maintained in the West Indies during the hurricane season. The bureau has arranged with the various wireless services for disseminating broadcast over the oceans and the Gulf both forecast messages and storm-warnings. Through its display stations, the bureau reaches every port and harbor of any considerable importance on the Great Lakes and the seacoasts. The regular stations at eight strategic points maintain a vessel-reporting service, whereby information regarding passing vessels, wrecks, and marine disasters is promptly communicated to interested parties. The weather observers at all marine stations

report vessels in distress and send out calls for help which bring assistance. The Bureau publishes frequent meteorological charts of the oceans and Great Lakes.[1]

THE DEPARTMENT OF COMMERCE.

After a statement has been made of the commercial activities of the eight departments of the Federal Government first established, the question might be asked, what important functions remain to be subserved by a Department of Commerce? Congressman Mann, of Illinois, speaking for the House Committee on Interstate and Foreign Commerce, answered the question in the course of the debate preceding the establishment, in 1903, of the Department of Commerce and Labor. He pointed out that, following the creation of the necessary administrative departments in the early period of United States history, Congress was conservative about establishing new departments, whose heads would be entitled to seats in the President's Cabinet, the efficiency of which would be destroyed if its size were unduly increased. Mr. Mann said:[2]

"It is evident that not more than one new Department of the Government is likely to be created at this time in view of our past policy, but it has seemed to your committee that the enormous interests in our country not engaged in agriculture but now engaged in trade and transportation, in manufacturing and mechanical pursuits, might well have gathered together into one new executive department of the Government those branches of the public service clearly related to their interests, and which could easily be detached from the Departments in which they now are."

Some of the Departments in existence prior to February 14, 1903, when considerations such as those stated above resulted in the passage of the act establishing the Department of Commerce and Labor, were then much more concerned with the development and regulation of commerce than they now are. Most of the bureaus and services now comprised within the Department of Commerce were originally established as branches of the older Departments, particularly the Treasury Department, from which were transferred, in 1903, the Bureaus of Navigation, Statistics, Standards, and Immigration, the Lighthouse

[1]Other bureaus which are indirectly concerned with commercial regulation are the Bureau of Animal Industry, which supervises the movement of animals, meats and meat food products in interstate and foreign commerce, exercises important quarantine functions, and seeks to control and eradicate diseases of animals, particularly in times of epidemic; the Bureau of Plant Industry, which has on occasions made investigations into the best methods of marketing, transporting, and storing fruits; the Federal Horticultural Board, which administers the Federal plant quarantine act of 1912, having to do with the entry of foreign nursery stock and other plants and plant products, and the establishment and maintenance of a foreign and domestic quarantine on account of plant diseases and insect pests; the Office of Markets, which investigates and reports on the marketing and distribution of farm products; the Bureau of Chemistry, which inspects the conditions of manufacture, transportation, and sale of food and drug products, and makes investigations looking to improved methods of transporting food products; the Bureau of Statistics, which issues crop reports which are of great value to business men in prognosticating conditions; and the Office of Public Roads, which is energetically furthering the "good-roads movement."

[2]*Cong. Record*, XXXVI, 1903, p. 1036.

Board, the Lighthouse Establishment, the Steamboat-Inspection Service, the United States Shipping Commissioners, and the Coast and Geodetic Survey. From the Department of State came the Bureau of Foreign Commerce, and from the Department of the Interior, the Census Bureau. The U. S. Fish Commission and the so-called Department of Labor, then unattached to any of the eight executive departments, were annexed, and two new bureaus created, those of manufactures and of corporations. As its title and make-up indicate, the departmental functions were not confined to commerce, but included labor as well, but ten years later a separate Department of Labor was established.

The oldest of the institutions over which the Department of Commerce has supervision is the Lighthouse Service.[1] Although continuously in the Treasury Department until 1903, this service has many times been reorganized and placed under the supervision of various officers. By the act of August 7, 1789, Congress accepted the cession of the eight lighthouses then maintained by the States, and undertook to manage them through the Secretary of the Treasury. His functions were assumed by the newly created Commissioner of Revenue from 1792 until 1802, when the office was abolished. The secretary resumed control until 1813, when the commissioner's office was reestablished, and lighthouses were again placed within his jurisdiction. When for a second time his office was discontinued, in 1820, the management of the service was delegated to the Fifth Auditor of the Treasury, who remained in control, and was known as the General Superintendent of Lights, until 1852, when a more enduring organization was effected. The Lighthouse Board, then created, consisted of the Secretary of the Treasury, three naval officers, three engineer officers of the Army, and two civilians, eminent in science. In 1903 the Secretary of Commerce and Labor assumed the functions exercised before by the Secretary of the Treasury. The final act of reorganization was that of June 17, 1910, which abolished the Lighthouse Board and created in the Department of Commerce and Labor a Bureau of Lighthouses, with a Commissioner of Lighthouses in charge. The duties which devolve upon the service include the marking and lighting of the channels of harbors and navigable rivers; the installation and maintenance of aids to navigation; the testing of apparatus with a view to introducing improvements; and the publication of information concerning aids to navigation in the Weekly Notices to Mariners, which show the changes in lights, buoys, etc., and contain current information necessary for safe navigation.

Another institution, almost as old as the Government, by which commerce is facilitated and benefited, is the Census. The first census was taken in 1790, when the returns were made to the President. Beginning with 1800, the Secretary of State was given general supervi-

[1] *Organization and Law of the Department of Commerce and Labor*, 65–66.

sion, which he retained until the establishment, in 1849, of the Department of the Interior, after which the head of that Department exercised supervisory functions until in 1903, when the work was transferred to the new Department of Commerce and Labor. Previous to 1902 the Census Office was discontinued at the expiration of the work of taking each decennial census and then reorganized for the succeeding census, but in that year it was transformed into a permanent and continuous institution. When it was transferred to the Department of Commerce and Labor in 1903, the designation was changed to "Bureau of the Census." Until 1880 United States marshals were required to take the census, but thereafter special supervisors and enumerators were employed.

The Census Bureau is now no longer maintained merely for the decennial enumeration of the population, but is charged with the compilation of special statistical reports on a variety of subjects. A census of manufactures is taken every five years, and the act providing for the census of 1910 required a similar census of agriculture. Under the act of 1902, moreover, the decennial collection of statistics is required in connection with transportation by water, express business, banking and loan institutions, the fishing industry, and in other fields. Quinquennially the bureau compiles statistics relating to street railways, telegraph and telephone lines, and electric light and power stations, and annually, on the production and distribution of cotton and forest products. These statistical reports are included in monographs affording valuable economic and historical information.

The Coast and Geodetic Survey was the first technical bureau established by the Government. In 1807 the President was "authorized to cause a survey of the coast of the United States to be made." The organization of the work was delayed by the war of 1812, and operations did not begin until 1816. The early work was done under the supervision of the Treasury Department, where the Survey remained until 1903, with the exception of two short periods, both before 1836, when it was temporarily supervised by the Secretary of the Navy. The connection with the Navy Department, nevertheless, was, until the Spanish-American war, a close one. For fifty years, previous to 1898, nearly one-half of the Survey vessels were both manned and officered by the Navy, but these duties have, since that time, been performed exclusively by civilians. The present organization dates from 1843, and the name "Coast and Geodetic Survey" from 1878. Previous to the latter year the appellation "Coast Survey" was used. The Survey is charged with the survey of the coasts of the United States and of coasts subject to its jurisdiction, and with the publication of charts covering these surveys. Its activities are not, however, confined strictly to the coasts. Rivers are surveyed to the head of tidewater or ship navigation; deep-sea soundings, and temperature and current observations

are taken in the Gulf Stream and Japan Current, as well as along the coasts; magnetic researches and observations are made on land and sea; heights and geographic positions are ascertained; and latitude and longitude are determined and triangulation work done in the United States. Publicity is given to the results of these observations through a variety of media, including some of especial benefit to mariners, such as sailing and harbor charts, general charts of the coast, Tide Tables, and Coast Pilots containing sailing directions. The Bureau is, with the Bureau of Lighthouses, a joint publisher of the weekly Notices to Mariners.

The Bureau of Foreign and Domestic Commerce is a consolidation of three bureaus, Statistics, Foreign Commerce, and Manufactures. Preceding the organization in the Treasury Department of the Bureau of Statistics (by the act of July 28, 1866), the Department had been systematically collecting statistics for nearly fifty years, under the authorization of the act of February 10, 1820. Even before that time the Secretary of the Treasury had been called upon by Congress for statistical reports concerning commerce. The information was secured by the collectors of customs, and compiled and published, after 1820, by a Division of Commerce and Navigation, which was consolidated with the Bureau established in 1866. The Bureau of Statistics originally published data relating to foreign trade alone; but, beginning in 1875, it was required to publish statistics of internal commerce, other than by railroad, as well. Since 1892 it has been required to publish statistics of imports and exports moving by rail as well as by water. A Statistical Office, established in the State Department in 1842, was organized in 1874 as the Bureau of Statistics. In 1897 its name was changed to Bureau of Foreign Commerce, to avoid confusion with other governmental statistical bureaus. Finally, in 1903, it was merged into the Bureau of Statistics above referred to. Its principal duty was the publication of consular reports. The final consolidation occurred in 1912, when with the Bureau of Statistics was combined the Bureau of Manufactures, to form the Bureau of Foreign and Domestic Commerce. The Bureau of Manufactures was one of the two new bureaus established in 1903. It was designed "to foster, promote and develop the various manufacturing industries of the United States, and markets for the same at home and abroad, . . . by gathering, compiling, publishing, and supplying all available and useful information concerning such industries and such markets, and by such other methods and means as may be prescribed by the Secretary or provided by law."

The Bureau of Foreign and Domestic Commerce is closely related to the promotion of commerce. To that end it issues publications containing a large amount of useful information. Daily Consular and Trade Reports, together with the reports of the commercial agents of the Department, contain up-to-date information regarding trade

conditions in foreign countries, opportunities for the expansion of both foreign and domestic trade, and information as to the service rendered by the Government for the promotion of commerce. Special bulletins relate to subjects of current commercial significance; a *World Trade Directory* shows the names of possible foreign buyers of American products; confidential circulars indicate current projects, involving purchases, which are of interest to American business men; the "Tariff Series" includes bulletins on such subjects as "Consular Regulations of Foreign Countries," and "Foreign Tariff Notes;" and a monthly sailing-dates bulletin shows the sailings from the principal ports of the United States to the principal ports of the rest of the world.

The publications mentioned are those which are not specifically related to the statistical functions of the bureau. The statistical publications are necessarily voluminous. The statistics of foreign commerce embrace tables showing imports and exports by articles, countries, and customs districts; the transit trade; the warehousing of imported goods; imports entered for consumption; ocean freight rates; and the movement of American and foreign vessels in the foreign trade. These statistics are collected in a large volume published annually. The *Statistical Abstract of Foreign Countries*, an annual publication, shows, in terms of American currency, weights, and measures, the imports into and exports from each country of the world. *The Foreign Commerce of the United States*, a monthly statement of the "total values of imports and exports," is also published. This publication, formerly entitled *Monthly Summary of Commerce and Finance*, has in the past contained monographs upon commercial and industrial subjects, and, until 1913, it presented figures concerning internal commerce, *i. e.*, the quantities of certain staple commodities, *e. g.*, live-stock, grain, produce, provisions, merchandise, lumber, fruits, coke, coal, and petroleum, handled at various principal markets. The Bureau also publishes *The Statistical Abstract of the United States*, a condensation of miscellaneous statistical information collected by the various branches of the Government.

The reason for the publication of so great a variety of statistics was stated by Secretary Nagle, in his annual report for 1911 (p. 78), as follows:

> "Changes in the character of the imports and exports have materially affected trade currents, the share of our exports which is sent to Europe having fallen from approximately 80 per cent a quarter of a century ago to less than 64 per cent in 1911, and that to other parts of the world proportionately increased. These changes in the character of the commerce and its movements, as well as the increase in the volume of both imports and exports, have stimulated the desire on the part of the public for commercial information in much greater detail and to be presented with much greater promptness."

In 1905 four commercial agents were added to the staff of the Bureau of Manufactures and sent abroad with the object of promoting the foreign commerce of the United States. Manufacturers and

merchants, as well as the press, have expressed their appreciation of the services rendered by these agents through their reports on conditions abroad. Beginning with 1912, the commercial agents were also assigned to work at home, looking to the development of the export trade through personal contact with the manufacturers and merchants in whose interest they have carried on their investigations abroad. The number of men engaged in this work has been increased and the service extended. In order that this service may supplement rather than duplicate the work of consular officers, the men employed are chiefly technical experts, familiar with the conditions existing in particular branches of trade.

Another new departure in the work of the bureau lies in the cooperation which is now undertaken with representative trade organizations through conferences with their officers, through the use of their membership lists for the dissemination of confidential commercial information, and through filing with them plans and specifications for work which their members would be qualified to undertake. The part played by the Department in the organization of the new Chamber of Commerce of the United States, established in 1912, was a recognition of the importance of the trade associations. The Bureau, which for a year had been collecting information regarding American commercial associations, sent broadcast to these organizations an invitation to attend a conference called by the President. Some 700 delegates, representing 400 commercial associations located in every part of the United States, thereupon cooperated to form the new body which is to coordinate the unrelated efforts of commercial organizations, looking towards trade promotion.

The lack of as general a utilization of the facilities provided by the Government for the promotion of commerce as is possible has been recognized by the department, which, in 1911 and 1912, through the Bureau of Manufactures and its successor, the Bureau of Foreign and Domestic Commerce, published pamphlets entitled "Promotion of Commerce,"[1] containing outlines of the services maintained by the various governmental offices and bureaus. While the data thus presented were little more than an index to the activities of these agencies, the pamphlet was designed to be of assistance to manufacturers and merchants, to whom it was sent with the advice that they secure additional information from those bureaus and offices engaged in work of particular interest to them.

The work of the Bureau of Standards was inaugurated in 1830, when the Secretary of the Treasury was authorized to examine the weights and measures used in the various custom-houses. In 1836 the Department was ordered to furnish the States with copies of the standards adopted. Until 1901 the Superintendent of the Coast and Geodetic

[1]Miscellaneous Series, Nos. 6, 6A, and 6B.

Survey, then in the Treasury Department, also served as the Superintendent of the Office of Construction of Standard Weights and Measures, a designation first used in 1882. The functions of the office were limited. The growing demand for a great variety of standards and for certification by the Government as to the accurateness of weights and measures led, in 1901, to the dissociation of the old office from the Treasury Department and its establishment as the National Bureau of Standards. The independent existence of the bureau was, however, of short duration, for in 1903 it was attached to the Department of Commerce and Labor and its name changed to "Bureau of Standards." The Bureau is the custodian of standard weights and measures which under the Constitution are fixed by the Federal Government. It constructs standards, together with their multiples and subdivisions, and compares the standards used in commerce, manufacturing, engineering, scientific investigations, and educational institutions with those adopted or recognized by the Government. The uniformity and precision in weights and measures, which the makers of the Constitution desired to insure, is secured by furnishing to official sealers, acting under governmental authority, and to private parties, accurate standards of length, mass, and capacity.

Congress first provided for a Steamboat Inspection Service by the act of July 7, 1838, thirty-one years after Robert Fulton, by running the *Clermont* from New York to Albany, demonstrated that the use of steam power in the propelling of ships was practicable. The enactment of the law was coincident with the initial trip of the *Great Western*, the first steamship built for the trans-Atlantic service. Under this law, Federal district judges appointed inspectors of hulls and boilers in their respective districts, but the supervision of the service was vested in the Secretary of the Treasury. The method of appointing inspectors was changed and added powers were given to the service from time to time. In 1852 the President was charged with the duty of appointing supervising inspectors; in 1871 a Supervising Inspector General, who is still in charge of the service, was authorized; and finally, in 1903, the Secretary of Commerce and Labor took the general jurisdiction out of the hands of the Secretary of the Treasury. The service is charged with the inspection of all vessels engaged as common carriers in interstate commerce, the licensing of the officers thereof, and the administration of the laws relating to such vessels and their officers and crews for the protection of life and property. It formulates such rules governing the building and operation of ships as public safety requires, inspects the materials used in steamship boilers, tests the boilers before they are placed in service, and determines the passenger-carrying capacity. It examines and licenses masters, chief mates, other mates in charge of a watch, pilots and engineers of steamships, and masters and chief mates of sailing-vessels of over 700 tons. These licenses it is empowered to revoke, in cases of incompetence, misbehavior, or negli-

gence. An annual inspection is made of the hulls, appliances, boilers, and machinery of all steam, gas, and motor vessels, to determine their stability, accommodations, and safety, including the provision of fire apparatus, life preservers, and life boats. Sailing-vessels over 700 tons and other vessels and barges of over 100 tons are also inspected annually with reference to the stability of their construction. Necessary repairs may be required to be made.

The regulations which the service makes as to the operation of vessels upon navigable waters relate to such subjects as the passing of ships, the transportation of gunpowder, the carriage on non-passenger vessels of persons not belonging to the crew, and the issuance of special permits for excursions. The laws for the protection of life and property aboard vessels, the enforcement of which is committed to the service, are of varied nature and considerable volume. They relate, among other things, to non-transportable goods, maltreatment of crews, commission of crimes aboard ship, and installation of fire-fighting and life-saving appliances.

The bureau in the Department of Commerce which is perhaps most vitally concerned with maritime commerce is that of Navigation, which is entirely distinct from the bureau of the same name in the Navy Department. Its varied duties were, at the time of its establishment under the Secretary of the Treasury in 1884, performed by a number of agencies in his Department and by the circuit courts. Various functions have since been added, and the bureau, which is one of those transferred to the Department of Commerce and Labor in 1903, is now charged with the enforcement of the great volume of Federal navigation laws, covering a wide range of subjects, and with the recommendation of changes in those laws. The bureau has over the commercial marine, including the merchant seamen of the United States, a supervision which is limited only by the grant of specific authority in certain respects to other governmental agencies. It "registers" American vessels engaged in the foreign trade, "enrolls" those engaged in the inland and coastwise trade, and "licenses" those of the latter which are of less than 20 tons measurement. It supervises the laws relating to the admeasurement of vessels, their original letters and official numbers, publishes annually a list of the vessels of the United States, and collects statistics of the merchant marine and ship-building industry. The commissioner examines the accounts of port collectors, surveyors of customs, and shipping commissioners, with respect to such matters as fines, penalties, and forfeitures required under the navigation laws, services to vessels, navigation fees, amounts collected on account of decease of passengers, tonnage-tax collections, and shipment and discharge of seamen.

The bureau relies for the fulfillment of its varied functions upon the cooperation of other agencies. The enforcement of the navigation laws, for instance, has from the time of its establishment been intrusted

chiefly to customs officers, who previously had jurisdiction in the matter. Those functions which relate to the protection of seamen are administered by shipping commissioners who were first appointed in 1872, and are stationed at important ports of entry on the seaboard. At points where there is no shipping commissioner the collector of the port performs the functions elsewhere assigned to the commissioners, including the registration of men seeking employment as seamen, the superintendence of their engagement and discharge, the rendition of aid to masters in compelling seamen to be aboard ships at the agreed time, and the facilitation of apprenticeships. The wide scope of the ureau's operations makes its commissioner an authority on maritime ıbjects. His annual reports contain not only valuable statistical ıta concerning the American merchant marine, but information in lation to registry laws, regulation of radiotelegraphy, ship subsidies, fety of life and property at sea, and other current questions of mari- ıe policy.

The Bureau of Corporations was established in 1903, by the act which ated the Department of Commerce and Labor, to perform duties of investigative and informational character. Its powers of inquiry publicity constituted an important part of the regulative machinery rided for corporations by the Federal Government. On the basis s investigations into the organization, conduct, and management int stock companies and corporate combinations, including those ged in interstate and foreign commerce, the President was enabled ıake recommendations to Congress for legislation to regulate ıerce. The Bureau of Corporations, as stated below, was, in merged into the Federal Trade Commission.

THE DEPARTMENT OF LABOR.

only bureau of the new Department of Labor, established in which is closely associated with commercial matters is that with immigration. In 1891 the office of the Superintendent ıigration was established in the Treasury Department, and there- he National Government undertook the direct supervision of ation matters. These had theretofore been left to State officials, ter 1882, acted under the direction of the Secretary of the y. The Bureau of Immigration, with a commissioner general e, was established in 1895, transferred to the Department of ce and Labor in 1903, and to the Department of Labor in 1913. 07 to 1913 it was known as the Bureau of Immigration and zation, but two separate bureaus in the Department of Labor with these questions. The immigration and Chinese exclu- are administered by the Bureau of Immigration, which main- gid surveillance over all arriving steamships, as well as over departing from important European ports, destined to the ates.

INDEPENDENT GOVERNMENTAL AND INTERNATIONAL AGENCIES.

Of the agencies of government, unaffiliated with any of the executive departments, that having the greatest power to regulate commerce is the Interstate Commerce Commission, a body which, since its establishment in 1887, has become a powerful regulative agency, exercising a great influence over interstate transportation. Although designated as a "commerce" commission, its functions relate more specifically to matters of transportation. By virtue of its control over railroads and an increasing authority over water carriers, the commission has been able to regulate rates, eliminate special favors, and establish more convenient and safer service, thereby greatly facilitating the development of commerce.[1]

In 1914, Congress created a Federal Trade Commission which took the place of the Bureau of Corporations. The Federal Trade Commission has much larger powers than the Bureau of Corporations possessed. It is an investigating and supervisory body created primarily for the purpose of maintaining fair competition among corporations engaged in interstate trade. Congress gave the Commission, which is a body of five men, large powers of investigation and minor powers of regulation. The creation of the Commission was intended to be a step towards the ultimate goal of Federal regulation of corporations engaged in interstate commerce.

Aid, regulation, and protection are extended to commerce by the Federal Government, not only through national agencies, but also through international bureaus, commissions, and congresses. Of these, the Pan-American Union has been the most active in fostering commerce. In 1881 James G. Blaine, when Secretary of State, suggested the convocation of a Pan-American conference, which was held in Washington in 1889–90. This conference established the International Bureau of American Republics, known since the fourth conference, held in 1910, as the Pan-American Union. While the union performs many duties, largely of an informational character, its great aim is to develop and maintain closer relations of commerce and friendship between the 21 member republics of the western hemisphere. Its publications, including a monthly magazine, special reports, and hand-books, relate particularly to commercial questions. An extensive correspondence looking to the promotion of trade is carried on, not only with the governments of the member countries, but with manufacturers, merchants, and others.[2]

---

[1]The commission is discussed in vol. I, chap. xvii.

[2]Other international unions concerned with commerce, of which the United States is a member, are: The Universal Postal Union, International Radiotelegraphic Union, International Railway Congress, Permanent International Association of Navigation Congresses, Union for the Protection of Industrial Property, Metric Union, International Union for the Publication of Customs Tariffs, and International Office of Public Health. These are discussed in Reinsch, *Public International Unions*, etc.

THE JUDICIARY AND LEGISLATIVE AGENCIES.

The agencies thus far considered in discussing government aid and regulation of commerce were those within the executive branch of the Government. A survey of the Federal Judicial system indicates that there have been two courts established for the handling of commercial matters—the United States Court of Customs Appeals and the United States Commerce Court, both of recent creation.

The Court of Customs Appeals was created August 5, 1909, to hear all appeals from the decision of any board of United States General Appraisers in customs cases, relating to the classification of merchandise, the rate of duty assessed, fees and charges connected therewith, and any other appealable questions as to the laws and regulations governing the collection of the customs revenues.

The Commerce Court, in existence from 1910 to 1913, was designed to effect a speedy, uniform, and systematic enforcement of the interstate commerce law. Congress established the court upon the recommendation of President Taft, for the purpose of creating a tribunal which should eventually be a body of experts qualified to undertake the consideration of technical questions in a special field. The court, for reasons stated in Volume I, Chapter XVII, was disestablished after an existence of only three years.

The consideration of the legislative machinery of the Federal Government which deals with commerce has been left until the last, because, despite its importance, it is a changing mechanism and one which has little actual contact with commerce. Through its instrumentality are drafted the laws which are administered by the agencies which have already been considered. Although the legislative body is the creative body, and not the one which performs the specific acts of "aid and regulation" which have been considered in this chapter, its powers to aid and regulate commerce are none the less important. These powers are exercised largely through committees and commissions.

When the National Government came into existence, the general practice was to create select committees to handle subjects as they arose, and after the completion of the work so delegated, the committees ceased to exist. Some idea of the difficulties involved in this method of procedure may be gleaned from the fact that in the Third Congress, for instance, there were at least 350 select committees. Gradually the practice grew of creating standing committees, to whom were referred bills relating to the general subjects, over which they were given jurisdiction. This process has continued, until there are a large number of standing and a very few select committees at each session. The committee chambers are not only the laboratories where the legislative work of Congress is in large measure done; they also furnish the means whereby public opinion may most effectively be brought to bear

upon proposed measures, and the hearings which the committees hold do much to inform the public of the issues at stake in important national affairs upon which legislation is pending. In the period from 1902 to 1909, the House Committee on Interstate and Foreign Commerce alone issued 89 publications, including reports of public and private hearings, special investigations, etc., dealing with important commercial questions.

Of the Senate committees, those particularly concerned with commerce are the following: Commerce; Expenses in the Department of Commerce; Foreign Relations; Immigration; Inter-Oceanic Canals; Interstate Commerce; Public Health and National Quarantine; Railroads; Standards, Weights, and Measures; Transportation Routes to the Seaboard; Transportation and Sale of Meat Products. House committees similarly concerned are: Alcoholic Liquor Traffic; Expenditures in the Department of Commerce; Foreign Affairs; Immigration and Naturalization; Interstate and Foreign Commerce; Merchant Marine and Fisheries; Railways and Canals; Rivers and Harbors.

The Government of the United States has gradually built up many agencies for the regulation of commerce. Each of the three great branches of the Federal Government, but the executive branch in particular, is concerned with the regulation of trade. These governmental agencies have varied activities, many of which are of great importance. The United States Government, however, is the patron rather than the autocrat of commerce, its policy being to maintain commercial freedom by means of such restrictions as are demanded by the public for its own protection.

CHAPTER XXXVIII.

THE CONSULAR SERVICE OF THE UNITED STATES: ITS HISTORY, COMMERCIAL FUNCTIONS, AND INFLUENCE UPON AMERICAN COMMERCE.[1]

Duties performed by consuls, 1776 to 1789, 267. The pre-constitutional consular service, 268. Treaty of amity and commerce with France, 1778, 268; with The Netherlands (1782), Sweden (1783), and Prussia (1785), 269. Powers of consuls defined in treaty with France, 1788, 270. An inadequate consular service, 1789–1856, 271. Acts of 1790 and 1792, 271. Consuls required to certify invoices of imports, 1818, 273. Legislation regarding consuls prior to 1856, 273. Consular reform, acts of 1855 and 1856, 274. A service unresponsive to commercial needs, 1856–1906, 276. Questions of salary, of fees, and of trading, 278. Growth in number of consuls, 1856 to 1906, 279. Efforts to reform the service, executive orders, 279. Slight results accomplished, 280. Reorganization of the service; the Lodge act, 1906, 281. Provisions and effect of Root-Roosevelt executive order of June 27, 1906, 282. Extension of the merit system by President Taft and Secretary Knox, 283. Act of May 11, 1908, 284. Organization and supervision of the service in 1913, 285. Extraterritorial and other functions of consuls, 288. Activities of consular service in promoting trade, 290. Publications containing consular reports, 290. Services in preventing frauds against customs, 293. Personal service of consuls to facilitate trade, 293.

The American consular service originated in the year 1776, when the Congressional Committee of Secret Correspondence appointed Silas Deane as political and commercial agent for Europe, and Thomas Morris, a half-brother of the great financier, Robert Morris, as commercial agent. Both went to France, and there assumed consular functions only as a matter of necessity. The "commercial" functions delegated to them at the outset were of a fiscal nature, involving such matters as the purchase of supplies, but with the growth of commerce they were compelled to attend to the protection of American seamen and shipping in French ports and to other duties of a similar nature.

The chief functions performed by consular officers of this and other nations, during this period, related to the protection of the persons and property of the citizens of the country in whose service the consuls were employed. While retaining their earlier duties, American consular officers, in common with those of other progressive nations, during the latter half of the nineteenth century, undertook other tasks which almost overshadow in importance the indispensable functions which formerly devolved upon them. Still solicitous for the welfare of citizens and of their property, when either or both chance to be abroad, consular officers became actively engaged in broadening the outlook of Americans so that they may more and more have occasion to extend

[1] This chapter is to a large extent based upon the volume by Professor Chester Lloyd Jones, *The Consular Service of the United States: Its History and Activities* (1906), which has been condensed, rewritten, and brought down to date. Use has also been made of Emory R. Johnson's article on "The Early History of the United States Consular Service, 1776–1792," in *Political Science Quarterly*, XIII. March 1898, p. 19.

their interests to foreign countries. To his duties, which formerly involved the aid and protection of fellow-citizens, settlement of disputes between masters and seamen, care of sick and disabled seamen, protection and superintendence of maritime interests generally, and, finally, protection of the customs revenue, the consul added those of an active commercial agent. The modern consul studies the needs of the population within the district where he is stationed, with a view to ascertaining opportunities for the extension of the foreign trade of his own nation. When once this trade has been established, his duties of protection are extended to it.

Obviously, the present-day consular position is not one that can be filled with success by the purely political appointee. The new duties call for keen, active men, and the interests which depend upon the service to-day are better organized and prompter to complain of inefficiency than were the classes served by the consular agents of yesterday. New functions have brought with them insistent demands for reorganization to which Congress has not turned a deaf ear. What the changes have been, not only in the nature of the service performed and results achieved, but in the personnel and organization as well, it will be the purpose of this chapter to indicate. The sections immediately following will deal with the legislative history of the service, while subsequent sections will treat of its commercial functions and its influence in building up international trade.

THE PRE-CONSTITUTIONAL CONSULAR SERVICE.

The status of the consular service during the days of the Continental Congress and the Confederation is of interest, because the organization then effected was the one adopted by Congress in the act of April 14, 1792. Meanwhile, following the adoption of the Constitution in 1789, the preexisting service continued to represent the United States at foreign ports. Originally no distinction was made between diplomatic and consular officers. The first representatives of the revolting colonies were charged with the performance of duties of a diplomatic and fiscal nature, and it was not until later that the consular functions were added. Commissioners sent to France in 1776, and the ministers who succeeded them, performed all three functions, while commercial agents performed consular and fiscal services. At the close of the Revolutionary War, when fiscal agents became unnecessary, the office of commercial agent was continued for the exercise of strictly consular functions.

The existence of different appointive agencies and the failure to define specifically the powers of early foreign representatives led to a great deal of confusion, which was not remedied until 1780. The treaty of amity and commerce concluded with France in 1778 had provided for the stationing of consular officers at the ports of the two

countries. The first consul appointed by Congress under this authorization, and, strictly speaking, the first consul sent abroad from America, was Colonel William Palfrey. His authority made him in reality a consul-general, with jurisdiction over both American consular and fiscal affairs in France, and his salary was fixed at $1,500 per annum, in lieu of all commissions which he might collect. Palfrey perished when his ship was lost at sea. Congress, learning that he had not reached France, appointed Thomas Barclay vice-consul, in 1781, and when news of the disaster reached Philadelphia, Barclay was made consul. Although the division of powers between diplomatic and consular officers was not as distinct as it is at the present time, this action relieved the commissioners at Paris (in accordance with their wish) of the handling of consular matters, which had proved embarrassing for them, situated, as they were, miles from the seaboard and burdened with other onerous duties.

About the same time another distinct improvement was made in the handling of foreign affairs. The correspondence with representatives abroad had been carried on by the President of Congress and the three Congressional committees on secret correspondence,[1] commerce, and the marine. The first of these conducted the greater part of the correspondence until, in 1781, Congress established the Department of Foreign Affairs and delegated this work to the paid secretary who was placed in charge. Robert Livingston and John Jay were the only pre-constitutional Secretaries for Foreign Affairs. Their authority was limited by Congress, which required that, before being forwarded, important communications to foreign representatives should be submitted to it.

The establishment of international relations with countries other than France was a matter of slow development. Treaties of amity and commerce, similar to the French treaty, were concluded with the Netherlands in 1782, with Sweden in 1783, and with Prussia in 1785, all of which provided for the establishment of consulates. A similar right was obtained, with respect to Great Britain, following the final treaty of peace of September 3, 1783. However, the Congress of the Confederation did not order until 1785 "that the Secretary for foreign affairs report the number of consuls and vice-consuls necessary to be appointed by Congress and the foreign ports in which they should respectively reside." Following the report made in accordance with this order, the first provision for a consular service was made in the following resolution (October 28, 1785):

"Whereas it is expedient that consuls should be appointed in the different states with which the citizens of the United States are engaged in commerce; therefore,

[1] Established Nov. 29, 1775; name changed in April 1777 to Committee on Foreign Affairs.

"*Resolved*, that the ministers plenipotentiary of the United States in Europe, and where there is no minister the Chargé d'affaires, shall exercise the powers of a consul general for the Kingdom or states in which they respectively reside, provided that no additional salary be allowed for such service."

This half-way measure followed a fruitless attempt to establish consuls at 18 European ports and at Canton, and meant, in fact, very little in the way of a consular service, for during the period of the Confederation the properly qualified diplomatic officers were stationed in only three countries—France, Spain, and Great Britain. Although financial considerations had doomed to failure the resolution establishing 19 consulates, Congress was not averse to appointing consuls, for on January 26, 1786, both a consul and a vice-consul were authorized, to reside at Canton, and to serve without pay in any form.

The first definite statement of the powers and duties of American consuls is to be found, not in the acts of Congress nor in the treaties referred to, but in a convention with France, signed November 14, 1788, in accordance with the requirements of the treaty of 1778 that the functions of the consuls, which the contracting parties were permitted to appoint, should "be regulated by a particular agreement." France was desirous of action in this respect, for the legislative and administrative jurisdiction exercised by the several States over foreign commerce hampered the work of French consuls and often resulted in controversies with State authorities. The pressure of other matters in Congress, the delays in transporation, loss of papers, and opposition of such prominent Americans as Jefferson and Jay, delayed the negotiation of the "particular agreement" contemplated, but it was finally signed at Paris, by Jefferson, as American Minister, in 1788, and unanimously approved by the Senate the following year.

The commercial duties devolving upon consular officers, under this convention, were not numerous. Consuls and vice-consuls were authorized to establish chanceries for the swearing and filing of contracts and other documents between "persons of their nation." They were to handle questions arising between subjects or citizens of their own nation concerning losses sustained at sea, and were to do whatever they judged proper to save stranded ships. Over vessels flying their national flag they were to exercise police power, without, however, interfering with the local police. Deserters from ships' crews might be caused to be arrested and deported. Suits between citizens of either nation, who were in the other, particularly suits between masters and sailors, were made subject to the jurisdiction of consuls and vice-consuls. Expedition of commercial cases through "particular tribunals and forms" was provided for the merchants of each country when in the other. The connection of consular officers with commercial matters would necessarily be a close one, for the language of the convention contemplated that thev might engage in business on their

own account. In the definition of consular duties, the authorities of the Confederation had done better than in the creation of a service for "the convention as a whole was considered at this time a model instrument and was praised by foreign authorities as 'the most complete consular convention ever concluded and likely to be taken as a precedent for the future.' "[1]

AN INADEQUATE CONSULAR SERVICE, 1789-1856.

It was a very incomplete consular service that the Union inherited from the Confederation. Congress passed an act, which was approved by President Washington July 1, 1790, "providing the means of intercourse between the United States and foreign nations." The appropriation was a modest one. The President was "authorized to draw from the Treasury of the United States a sum not exceeding $40,000 annually, to be paid out of the money arising from the duties on imports and tonnage, for the support of such persons as he shall commission to serve the United States in foreign ports, and for the expense incident to the business in which they may be employed." The ministers at foreign ports continued to exercise the functions of consuls-general, remaining at their posts without, in all cases, receiving new appointments.

Although this was a modest beginning, the nation was in a much better position to deal with foreign affairs than it had been prior to the adoption of the Constitution. The Constitution had provided that the President[2] "shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other Public Ministers and Consuls." To assist the President in the conduct of foreign relations, the Department of Foreign Affairs was established by the act of July 27, 1789, and under Jefferson as Secretary it conducted consular correspondence and supervised the service generally.

Although Congress waited three years before enacting consular legislation, President Washington was not slow to exercise the appointive power conferred upon him by the Constitution in the establishment of consular offices abroad. Jefferson's influence as Secretary of State was important, both in the establishment of the service and in the precedents governing its action. Before Jefferson became Secretary of State, March 22, 1790, President Washington[3] had appointed only one consul, but in the summer following, a number of appointments were made, and during the first three years of the administration, before Congress acted in the matter, 15 consulates and 6 vice-consulates had been established. The consuls were at the outset authorized to dele-

[1]Jones (p. 4), who repeats language quoted by Secretary Seward in a letter to the Senate Finance Committee, March 16, 1864.

[2]Art II. sec. 2. [3]Samuel Shaw, Canton, Feb. 10, 1790.

gate agents to represent them in the ports in their districts. The consular officers whom Washington appointed were not compensated out of the annual appropriation for the conduct of foreign intercourse, but by fees which they collected and the profits of the business in which they engaged on their own account.

Congress took its initial action in respect to the consular service in the law approved April 14, 1792, which was enacted to carry into full effect the consular convention with France, ratified more than two years before. The act, though a brief one, was the only legislation of fundamental importance regarding the organization of the consular service until 1856. It summarized the principles laid down in the French convention, defined with more exactitude some of the consular duties with respect to succoring American seamen in distress, and authorized consuls to receive protests from any person, American or foreign, relative to the interest of any citizen of the United States.

It should be noted that this act did not create a consular service, but merely specified the powers and duties of the existing service, and did not aim even to be a complete statement thereof. The act did, however, specifically mention the Barbary States, and provided that salaries might be paid to such consuls as were required to be stationed there. In 1795, "as no one would accept the position otherwise," salaries[1] were authorized for the consuls established in Tunis, Tripoli, and Morocco; and, in 1797, similar action was taken with respect to Algiers.[2] The efficiency of the service during the next fifty years was seriously impaired by requiring all other consular officers, with few exceptions,[3] to rely for their living upon fees and private business. Washington made a good beginning in the establishment of a service which rendered indispensable protection to American shipping interests. During his first administration he appointed 30 consuls and 6 vice-consuls, who were well distributed throughout the commercial world.[4]

In the period antedating 1856 the amendments made to the fundamental law of 1792 related chiefly to the duties of consular officers with respect to seamen. Acts of this nature were passed in 1803, 1811, 1840, 1845, and 1850. They provided among other things that seamen were to be discharged in a foreign port only on approval of the consul,

[1] $3,000 each. [2] Originally $4,000; reduced in 1810 to $3,000.

[3] "Exceptions are: allowance for salary, $2,000 to consul at Paris; and $2,000 salary, with $2,800 for stationery, office rent and clerk hire, to consul at London. Acts of United States, July 19, 1836, March 3, 1837, August 26, 1842." Jones, 6.

[4] List prepared by the chief of the Bureau of Appointments (State Department) for Mr. M. J. Blair, who includes it in a thesis submitted at the University of Wisconsin, in 1910, for the degree of bachelor of arts, "A Study of Appointments to the American Consular Service," shows appointments to the following ports: *Consuls:* Canton, Madeira, Liverpool, Dublin, Bordeaux, Nantes, Rouen, Hispaniola, Martinique, Bilbao, London, Surinam, Santa Cruz (2), Bristol, Lisbon, Morocco, Copenhagen, Algiers, Calcutta, Havre. Falmouth, Cadiz, Alicante, Curaçao, St. Eustatia, Hamburg, Demarara, Malaga, Amsterdam. *Vice-Consuls:* Cowes, Marseilles, Hamburg, Havre, Fayal, Poole.

and that when discharged they were to receive advance wages, and their transportation home on American merchantmen was to be arranged for. All laws relating to the discharge and return of seamen were extended to whaling ships; greater care was required in the making up of ships' lists; and an abortive effort was made to prevent cruel treatment of sailors. During these years of expanding trade, when the American flag was a familiar sight in all seas, the consular service was not extended into new fields so fast as was commerce. Some of the legislation enacted for the protection of American seamen abroad vas therefore ineffective, and an attempt to remedy this difficulty was nade in the act of March 3, 1845, which provided that the "comnanding officer of a vessel or fleet on the high seas or in foreign ports here there is no United States consul . . . has all the powers of a nsul as regards mariners." A further effort to control the conduct mariners abroad is to be seen in the requirement that ships' papers deposited with the consul during the stay of the ship in port.

These early functions, assigned to American consuls, which related y to the protection of citizens and their property, were in 1818 rged to include the protection of the national revenue. The act to late the collection of duties on imports and tonnage, approved il 20, 1818, provided that American consuls must certify the ices of all goods declared for shipment to the United States, in gn ports, and subject to ad valorem duties under the tariff. The certion referred to was to be given only after the exporter had sworn e value shown in the invoice. Congress further showed a disposio increase the services of consular officers when in 1845 it provided hey should pay the amount of postage due on letters destined to nited States and held in foreign ports.

er legislation prior to 1856 related to the question of the remun of consular officials. The salaried Barbary Coast officers rohibited from trading on their own account, this being the first e of an interdiction which was not to become general until an a half century later. Although consuls were authorized t additional fees, the provision of outfits was discontinued in d the compensation was not generally sufficient to secure an service. As the commerce of the United States grew in volume, s considerable agitation for reform in the consular service, and ed about these matters of compensation, the chief point of ing the fee system. An investigation instituted by Secretary n, in 1830, indicated that the compensation was so low as to npossible for officers to maintain the social standing and influ n their positions demanded. Dishonesty was the consequence. and extortionate fees resulted from a practice of levying as ach instance, as could without difficulty be collected. False n of papers was resorted to, and fictitious claims for remuner-

ation on account of money alleged to have been expended in the relief of destitute sailors were filed. There were other evils. Trading consuls gained official knowledge and made personal use of the business secrets of their rivals; the absence of definite rules governing the rights and privileges of consuls resulted in different usages at different ports and opened the way for dishonest practices; and business failures sometimes led consuls to engage in ventures unbecoming an officer of the United States Government.[1] The inertia which blocked all efforts to improve the service successfully withstood plans for reform following investigations made in 1831, 1838, 1844, and 1846. In 1846 a select committee of the House reported "that they find the consular system . . . very imperfect . . . and by no means adequate to the present commerce of the United States."

Meanwhile the service had been growing numerically and geographically and the inadequacy of the ineffective organization adopted in 1792 became more and more apparent. The *Official Register* for 1851 shows that the United States was then represented by consular officers at 203 different foreign ports. This was exclusive, however, of "consular agents," who, although they had no legal status, were appointed by individual consuls to serve at ports at which American ships touched in their consular districts. Such agents performed the same duties as did the consul, to whom alone they reported, and with whom they divided the fees collected at the outlying office. Although departmental regulations required it, these appointments were not always reported to the Secretary of State.

CONSULAR REFORM ACTS OF 1855 AND 1856.

In 1855 a law was passed directed chiefly towards remedying the fee system. Doubts as to its constitutionality led to the passage, the following year, of an act which was aimed not only at the evils of the fee system, but also at the difficulties arising out of the lack of precision in former statements of the rights and powers of consular officers.

This so-called "reorganization" attempted to remedy the fee evil by authorizing the payment of salaries to the higher officials of the service.

[1]Secretary of State Livingston, who made an investigation of the service in 1831, gives a vivid picture of its status at that time. In his report he said: "Our consuls, with very few exceptions are commission merchants, anxious, like all other merchants, to increase their business and obtain consignments. In many, perhaps in the greater number of cases, the place is sought for chiefly for the advantage and the influence it will give to extend the commercial affairs of the officer. Can it be believed that this official influence will always be properly exercised? When it is, will not contrary suspicions be entertained? This must create jealousy, detraction, and all the arts that rivalship will exercise and provoke, amidst which the dignity of the public officer is degraded and his influence with the foreign functionaries lost. The consul at least, therefore, if not the vice-consul, ought to be salaried officers. They will never then by their countrymen, be suspected of acting toward them as their commercial interest, not as their duty requires; and their complaints in behalf of their fellow citizens will be attended to, because they will not be liable to the suspicion of advocating their own interest; consular offices would no longer be held in counting houses, nor the consul himself called from defending the cause of an injured American citizen to sell a barrel of sugar or to dispatch the settlement of an account." (Senate Doc. No. 83, 22 Cong., 2 sess. Mar. 2, 1833, p. 3.)

Two classes of consular offices were established, under schedules B and C.[1] Schedule B included, in addition to 82 consuls and 3 commercial agents, 7 consuls-general, a grade first authorized in 1854, at Alexandria, Egypt. This grade was originally a matter of necessity in Oriental countries, where rank and title were regarded as of great importance, and a consul found himself at a disadvantage in dealing with public officials. Gradually the office was extended to every important country, and a limited jurisdiction granted the consul-general over the consulates within the same country. For the 92 officers listed in schedule B, salaries were specified, ranging from $1,000 at several less important points to $7,500 each at Liverpool and London. These salaries were to be in lieu of all official sources of income, and the officers were not to engage in business.

Schedule C included 35 consuls and 6 commercial agents, for whom salaries ranging from $500 to $1,000 were specified. No fees were to be allowed these officers, but upon the privilege of private trading no prohibition was placed. The provision that officers under both schedules were entitled to compensation only if citizens of the United States embodied the established policy of the State Department, which had, for instance, issued a circular June 1, 1853, declaring that the employment of foreign clerks was "no longer to be countenanced," and that, if a United States citizen could not be secured, the department should be advised of the fact.

In 1857 there remained 101 out of 237 consular officers who were unaffected by this reorganization—officers who still received fees and fees alone for their services. An attempt to avoid irregularities was made, however, through a provision authorizing the President to prescribe the amount of the official fees when the law did not do so. Schedules of the fees authorized were to be posted, and quarterly reports of all official fees collected were to be made to the Treasury. This was a distinct advance over the period before 1856, when the entire service collected fees (whereas now only a fraction of it did so), and when the authorized rates were only partially stated by law and only incompletely reported, sometimes not at all. It should be noted, however, that the law of 1856 did not reach unofficial fees, which continued to be collected by all consular officers.

With the grant of salaries, former allowances for various expenses, such as clerk hire, ceased, except that non-trading consuls were allowed for office-rent an amount equal to one-tenth of their salaries, and that stationery, flags, and other similar articles were furnished by the Government. The act authorized the appointment of 3 interpreters for Chinese posts and 25 pupils, whom it was contemplated, should, while learning the duties performed by the service prior to taking higher positions, serve as clerks in important consulates. When, in

[1] Schedule A concerned diplomatic officers.

1857, the section authorizing their appointment was repealed, the complaint as to insufficient remuneration was renewed, for the consuls were obliged to pay for clerk hire out of their none too munificent salaries. The plan for a trained service was likewise thwarted.

The law of 1856 also aimed at reform in another direction. It gave considerable space to a more comprehensive and clearer exposition of the rights, powers, and duties of consular officers than had previously been attempted by Congress. These regulations extended to surety bonds, records, reports, absences, collection of fees, discharge of seamen, performance of diplomatic functions, etc. The President was, moreover, authorized to issue such additional regulations concerning the conduct of the affairs of the service as in his opinion the public interest demanded. The act furthermore marked a distinct departure from earlier practices with respect to the view taken of the scope of consular duties, which previously had been chiefly protective. Although the Secretary of State had, by the act of August 16, 1842, been required to inform Congress annually of such changes and modifications in foreign commercial systems as had come to the knowledge of the Department, no adequate provision had been made either for the transmission of such information to the Department or for its compilation there. The law of 1856 was the first to require consuls to furnish commercial information for the benefit of the people of the United States, and reports of the commercial relations of the United States with foreign nations were thereafter regularly issued.

A SERVICE UNRESPONSIVE TO COMMERCIAL NEEDS, 1856–1906.

The modifications thus brought about remained unchanged in any fundamental respect for fifty years. Until the passage of the Lodge bill, in 1906, efforts at reform reached matters of detail only and not broad questions of organization. Questions of consular pay were those which caused the greatest amount of discussion following the partial reorganization of 1856. It was urged, and with reason, that compensation still did not bear a proper relation to the importance of the posts, and relief was granted in several ways. Thirteen consular pupils were authorized in 1864, thus providing a limited number of consulates with clerical assistance at Government expense. This did not, however, achieve the other end aimed to be subserved—the training of men for higher posts—inasmuch as the appointees preferred the security of their humbler positions to the insecurity of consulships, subject to the uncertainties of the spoils system. The allowance for the hire of regular clerks was withdrawn in 1856, and was not reestablished until 1874. After the latter year, however, both the appropriations for clerk hire and the number of consulates affected were gradually increased. In 1882 a separate fund of $6,000 was created for clerkships not named in the law, which were to be established at the discretion of the Secretary of State. By 1896 the number of consulates specifically

provided with clerks had risen to 84, and the general fund had increased to \$30,000. The rent-allowance of non-trading consuls was, in 1872, increased from 10 to 20 per cent of their salaries. Another indirect method of increasing salaries was authorized in 1874, *i. e.*, the payment of compensation to vice-consuls of foreign citizenship. Appointments of this nature had become a practical necessity, but the policy of employing Americans, whenever possible, was still followed. There were also numerous cases of direct action in respect to increased salaries, scarcely a year passing during which changes were not made. Unfortunately, however, these changes were not dictated by a consistent policy looking to the adaptation of the service to commercial needs, and the resulting disparities in income at the various consulates appeared to have no basis, either in the relative importance of the posts or the demands made upon incumbents. In 1868 a feeble attempt was made to adjust the salary to the importance of the post by providing for the increase of certain low salaries, where the fees were high; but the law did not achieve its object, inasmuch as the amount of fees collected often failed to measure the importance of the post. Great injustice resulted from the lack of system with reference to remuneration. Before the reform of 1906, the income at a few posts like London and Paris had come to be enormous, when the item of unofficial fees was considered, while at other points, which were often undesirable and unhealthy, the total income was represented by salaries as low as \$1,500. On the other hand, with respect to this question of the direct increase of salaries, there are some evidences of a sincere effort to make the service conform to the demands made upon it. Between 1856 and 1901 there were added to the schedule (B) of salaried and non-trading consuls 220 consulates. Salaries were increased in 149 cases to keep pace with the growing importance of posts, while for an opposite reason they were decreased in 43 cases and the offices entirely abolished in 80 cases. In addition, 21 posts, once dropped, were reestablished.

Except in the early part of the period, commendable action was also taken by the elimination of offices from the other schedule (C)—that including salaried consuls permitted to engage in trading. Starting with 41 offices in 1856, an increase was effected in 1864, when 22 commercial agents were appointed in this class. From 1870 to 1895, however, there were generally less than 6 offices under schedule C, and in 1901 only 12.

What has been said in regard to schedule B indicates, what was indeed a fact, that the salaried force, as a whole, increased numerically during the period, which was a great advance over the days preceding the reorganization of 1856, when the regular method of paying consuls was by permitting them to collect fees. But for those officers who still collected fees, the arrangements continued to be unsatisfactory, although less so than formerly. Irregular collections and incomplete

returns were causes for criticism; other evils were involved in the collection of unofficial fees, which were still permitted to be charged at all offices and sometimes amounted to far more than the salaries attached to the offices.[1] There was less disposition to remedy matters of compensation in connection with fees than in other respects, and such modifications as were made were only in matters of detail. With respect to trade with Canada, fees were reduced and were in some cases entirely removed; those chargeable on American ships for official services were entirely removed; and those collected by consuls, paid by fees, and consular agents were modified. An improvement with respect to the consular agents was effected in 1856, when their choice was made dependent on the approval of the Secretary of State. The agent was, by the law of 1856, entitled to receive the fees he collected, or such amount thereof as the President directed, the balance going to his principal officer, who then found it possible by securing the appointment of a number of consular agents, to increase his own income at the expense of the Treasury, for the fees, if collected through his own office, would have belonged to the Government. This method of defrauding the Government was curtailed but not removed by the law of 1868, providing that "all moneys received for fees at any vice-consulate or consular agency of the United States beyond the sum of $1,000 in any one year, and all moneys received by any consul or consul-general from consular agencies or vice-consulates in excess of $1,000 in the aggregate from all such agencies or vice-consulates, shall be paid to the Treasury of the United States."

The law of 1856 continued an old abuse in permitting consular agents to engage in trade. Trading consuls were certain to derive personal gain from an intimate knowledge of the trade secrets of their rivals. The evil was not only pernicious but extensive, inasmuch as, at the close of the period, the consular agents were the most numerous class in the service, constituting, numerically, almost half of it.

During the period from 1856 to 1906 the protection of the revenue of the United States through the certification of invoices became an increasingly important function of the service. In 1863 the law regarding certification, which formerly had applied only to articles subject to ad valorem duties, was extended to all dutiable goods, and various other provisions were made from time to time to prevent customs frauds. But in spite of efforts to prevent them, undervaluation frauds continued, and in fact still give considerable concern to the State and Treasury Departments. Dr. Jones expresses the conviction[2] that the only means for their prevention lies in the "individual efforts of the various consuls in detecting frauds."

[1]The Third Assistant Secretary of State testified (1900) as to these amounts: "London safely $20,000; Paris probably as much."

[2]*Consular Service of the United States*, 26

Between the reorganizations of 1856 and 1906 there was a particularly rapid growth of the consular service, due to the impetus given by the imposition of heavier customs duties following the Civil War. For the proper protection of revenue, officers were stationed at inland nanufacturing towns, where the assistance rendered to visiting Ameri- :ans was slight. The foreign trade meanwhile increased rapidly and ontributed also to the growth of the service. Whereas, in 1857, there ere only 237 consular offices, in 1905 the number had increased to 334. n neither case do the figures denote the scope of the service, for they o not include the consular agents, who numbered 391 in 1905, but were ot recorded in the list of consular officers at the earlier date.[1]

Certain defects in the service as it was constituted from 1856 to 1906 licate the basis for the reform movement which, although it began ich earlier, did not bear fruit until 1906. The chief of the faults re these: (1) the service was only partially organized on a salary is (often an inadequate one), and retained in large measure the pre- ting evils of the fee system; (2) the organization was inflexible and responsive to the commercial needs of the country; (3) "it left ointment to rest on political influence, where it was most important it should rest on fitness, and it left tenure of office dependent on ical changes at home, where it was most important that the advan- s of experience in the service should be preserved;"[2] and (4) there no inspection of consular offices. An act passed July 11, 1870, orized such an inspection, and the effective work done by Inspec- eim resulted in some remedial legislation, but the law was repealed 22, 1872, and no adequate substitute provided until 1906.

EFFORTS TO REFORM THE SERVICE, EXECUTIVE ORDERS.

history of the reform movement is merely a repetition of the f Congressional apathy which characterized the period preceding rtial reorganization of 1856. As early as 1868 the shortcomings service were called to the attention of Congress by the Com- on Retrenchment. Reforms were unsuccessfully attempted in 384, and 1886. Finally, in 1895, a series of efforts began which l in the law of 1906.

lent Cleveland meanwhile took the matter into his own hands empted to introduce, by an executive order, a merit system. plicants for consular positions had been examined in 1866, and

---

f *the Department of State, 1905.* The status of the service on July 1, 1905, less than a the passage of the reorganization bill, was as follows:

iedule B (salaried and non-trading officers):		Schedule C (salaried; trading permitted):	
		Consuls	6
Consuls-general	58	Other Offices (feed; trading permitted):	
Consuls	216	Consuls	27
Commercial agents	11	Commercial agents	16

(334) does not indicate the numerical strength of the service in 1905, when there 00 appointees.

sular Service of the United States, 26.

executive orders issued by President Grant, in 1872 and 1873, pursuant to the civil service act of 1871, resulted in the examination of a number of applicants in 1873 and 1874, but the reforms were merely temporary. The examinations instituted by President Grant were given up when Congress refused to appropriate for the Civil Service Commission. President Cleveland's order of September 20, 1895, provided for the filling of vacancies in consulates carrying a salary of from $1,000 to $2,500, either (*a*) by the transfer from some other branch of the State Department of a person qualified by his training to fill the post; or (*b*) by the appointment of a person who had previously rendered satisfactory service in the Department; or (*c*) by the appointment of a person, who, first having furnished evidence of character, is then selected by the President for examination, whereby his qualification for the post is determined. The Secretary of State was authorized to select the subjects and prescribe the method of conducting the examinations, which were to be given under the auspices of a board of three persons selected by him. President Roosevelt, by an executive order dated November 10, 1905, extended these requirements to all consulates paying over $1,000, regardless of the upper limit.

These orders did not effect much improvement in the service, though the officials of the State Department have said that the character of applicants was somewhat improved. Events proved that the merit system could not be established solely by executive order. The Director of the Consular Service, Mr. Wilbur J. Carr, at a hearing before the House Foreign Affairs Committee, in 1912, told what happened:[1]

"When Mr. McKinley became President, there was the usual pressure brought to bear for foreign service appointments, with the result that from March 4, 1897 to November 1, 1898, it has been stated that 238 out of a total of 272 members[2] of the consular service had been recalled and their places filled by new men. The examination regulations were nominally in force, but the examination in fact was little more than a form."

The final impetus to the movement for legislative reform was given by the business interests of the country through the medium of chambers of commerce and other trade organizations. As early as 1894, business men had begun the agitation for a consular service which would furnish to American exporters the same efficient aid that the consular systems of foreign countries furnished to rival manufacturers abroad. Business men appeared before the Congressional committees dealing with foreign affairs, presenting arguments for reform and petitions from boards of trade and similar bodies. Publicity was secured through the press and through the issuance of pamphlets which secured a wide circulation,

[1]House Report No 840, 62 Cong., 2 sess., IV, p. 9.

[2]This is approximately the number of *consulates* in 1897. Blair found that McKinley made 257 changes, altogether, in his first term; and Cleveland 288 changes, in his second term (1893–97). He also found that most of these changes were made early in the term, in 1893, and before the merit system was introduced. This weakened the effect of the order.

and the agitation culminated in a consular reform convention, held in Washington in March 1906, during the session of Congress which passed the reorganization bill.

REORGANIZATION OF THE SERVICE. THE LODGE ACT, 1906.

Henry Cabot Lodge, who as early as 1896 had been a strong advocate of consular reform, introduced in the Senate in 1905 a bill, drawn by Secretary of State Elihu Root and himself, which finally passed Congress and was approved by the President August 5, 1906. This law mbodied many of the reforms contemplated for fifty years, and placed ie service upon a good working basis.

The schedules of 1856 were discarded, and in their place were estab- hed seven classes of consuls-general, with salaries ranging from $3,000 $12,000,[1] and nine classes of consuls, with salaries ranging from ,000 to $8,000.[2] The official titles adopted in preceding laws were ained, except that the grade of commercial agent was abolished. nsular agents, it was provided, might be appointed, as before, when essary. Five consuls-general at large were authorized to act as ectors of consulates, at an annual salary of $5,000. These officers to be appointed from the consular service and, under the direction of Secretary of State, are to inspect each consular office as often as once very two years. A limitation is placed upon the eligibility of for- ers for appointment by the provision that clerical positions paying o or more must be held by American citizens.

e reason for the general increase in salaries authorized in the act be found in the section which accomplishes the much-needed n, whereby "all fees, official or unofficial, received by any officer consular service for services rendered in connection with the of his office or as a consular officer" are to be paid into the ry of the United States. The "sole and only compensation" sular officers is to be the legal salary, with the single exception nsular agents are to receive one-half of the fees paid into their but not more than $1,000.[3] This arrangement, which was the ne, had been made uniform by an executive order issued in 1898 ident McKinley. The new law required that notarial services, "unofficial," be furnished by consular officers and that the remitted to the Government. Thus the unofficial fees of all (except one-half of those received by consular agents), which any cases reached high amounts, were henceforth to be paid to rnment. The consulates[4] paid by fees were placed on a salary

nd Paris. These salaries had been $5,000—the highest paid in 1905. (58 Cong., 3 United States Statutes, ch. 1407, p. 921.)
ool—previously $5,000.
ation affects only comparatively few officers. The fees collected at only 24 agencies 00 in 1912. The highest was Sonneberg, Saxe-Meiningen, $5,847.89.
e 43 in 1905.

basis; and only consular agents were in the future to be compensated by fees. Trading privileges, moreover, were denied to 49 officers who had possessed them in 1905, and henceforth could be exercised only by consular agents. The prevention of fraud in making official returns of fees was accomplished by providing for the affixation, on all documents requiring action by a consular officer, of stamps furnished by the Department of State.

Although it originally provided for the selection, appointment, and promotion of officers in accordance with a merit and examination system, the act, as passed, did not place consular officers above political influence. This end was, however, in large measure accomplished by an executive order drawn up by Secretary Root and promulgated by President Roosevelt during the same year, June 27, 1906. Consuls-general and consuls of the first seven classes[1] were to be appointed by promotions from the lower grades of the Consular Service and from persons in the service of the State Department with salaries of $2,000 or more, on the basis of ability and efficiency as shown in these services; appointments to the two lowest grades (8 and 9) were to be made by promotion, partially on the same basis (ability and efficiency), of consular assistants, vice-consuls, deputy consuls, consular agents, student interpreters, and interpreters, but examinations were required prior to the promotions. The examinations were also to be open to candidates who had been "specially designated by the President for appointment to the Consular Service subject to examination." Some of the lower appointees of the service were also required to pass examinations. The executive order, as amended, required "examinations of persons designated for appointment as consular assistant or as student interpreter, and of such persons designated for appointment as vice-consul, deputy consul, and consular agent, as shall desire to become eligible for promotion."

A board of examiners for admission to the consular service, consisting of the Secretary of State (or such officer of the department as the President might designate), the Director of the Consular Service, the Chief of the Consular Bureau, and the Chief Examiner of the Civil Service Commission (or some person whom the commission might designate) was constituted by the order for the purpose of giving and determining the scope of examinations. These are both oral and written, and, in addition, a rigid physical examination is given. The oral test aims to ascertain the existence or non-existence of such important qualifications as resourcefulness, business capacity, judgment, manners, and appearance. The written test covers thoroughly one modern language; international maritime and commercial law; political and commercial geography; arithmetic; natural, industrial, and commercial resources and commerce of the United States; American history, government,

[1]Salaries from $3,000 to $8,000.

and institutions; modern European, South American, and Far Eastern history; and political economy. A high percentage of failures testifies to the rigor of the requirements. Some of the applicants have been university graduates who have pursued special courses with the service in view, while others have been Government employes whose experience qualified them for the work. The ideal sought to be attained was expressed by President Roosevelt in these, the closing words of the order of 1906: ". . . Neither in the designation for examination or certification of appointment will the political affiliations of the candidate be considered."

Although in 1912 only one-quarter of the employes[1] in the service id entered following an examination, the effect of the leaven thus troduced was noticeable. Mr. L. R. Freeman, a journalist who made world tour at the close of the old régime (1904–1907) and a later one er the new order had been firmly established (1910–1912), reports it "the American consul of to-day is a far more useful Government vant than the one of ten years ago."[2] While the civil service pointees occupy posts confined almost entirely to the three lowest des of consulates, he found that the consuls in the more important ts were largely "fit survivors of the old régime."

resident Taft and Secretary Knox consistently followed the con- r policy inaugurated by President Roosevelt and Secretary Root, early in the administration it was announced that the merit system 'd be rigidly applied in promotions to the higher grades. Even the lon consul-generalship, formerly regarded as a political appoint- , was so handled, the Liverpool consul being advanced to this post. Efficiency records were introduced by Secretary Root, before the passage of the law in 1906, and promotions were made ident upon the showing made by consular officers. These records enabled appointments to be made on a real merit basis. The sed representation of the Southern States in the service was one tion of the non-political tendencies in the making of appointments the new régime. The executive order of 1906 had stated that, veen candidates of equal merit, appointments were to be so made ecure proportional representation of all the States and Terri- and the effort to carry out this order appears to have been sin- r a Southern representation of 51, in 1906, had risen to 103 in uring a Republican administration.

under examinations prescribed in 1895	81
under examinations prescribed in 1905 and later	146
atter were the more effective examinations.)	
ters	19
interpreters	22
	268

, "Trade Scouts who Capture Millions," in *World's Work*, XXVI, 1913, p. 201.

The law and executive order of 1906 together brought about a great improvement of service. Since then the amendments to the law have been only in matters of detail, but they have been directed towards strengthening the act. The law of May 11, 1908, effected a considerable number of changes in the grading of consulates. Some offices regarded as no longer necessary were closed; new ones were opened; the classification of certain underpaid consuls was raised; and in general an effort was made to make the service more nearly correspond to commercial needs. As organized in 1908, except for a change in the location of one consulate, the service has remained unchanged to date (1913).

Provisions for clerical services in consulates have become more and more liberal of late. The appropriation for the service in 1908 increased the number of consular clerks from 13 to 20, and designated them as consular assistants. The number had been increased to 40 in 1913, while the allowance for clerk-hire through the special fund had increased to $375,000.

In 1909, a Director of the Consular Service was appointed, with a salary of $4,500, to undertake the general supervision of the service, under the direction of the Secretary of State.

Bills for the reorganization of the Service have been introduced at almost every recent session of Congress, but usually they have not gone beyond the committees to which they were referred. The projects for reform have taken various lines. There is, for instance, a continual demand, due to changing trade routes and commercial conditions, for the disestablishment of existing offices and the creation of new ones. Although the rules of the State Department provide that candidates are not designated for examination with a view to appointment to particular posts, but in order to determine their eligibility for appointment to those posts in which, in the judgment of the Department, their services would best serve the public interests, it is nevertheless true that appointments are made to a place and not to a grade, with resulting inelasticity. Recent proposed legislation has aimed to overcome this inconvenience by providing that appointments should be to grades, so that the President would be empowered, without waiting for the salary appropriation in connection with a specific post, to assign a graded officer to a new position. A change by promotion under the present law requires from one to five years.

An insistent demand has been directed towards the enactment into law of an examination and merit system of appointment, similar to that worked out in executive orders. Until Congress takes this action it remains possible for an executive order to reestablish, in whole or in part, the system that prevailed prior to 1906. With the assurance that promotion was and would remain on the basis, not of political influence but of merit alone, consular officers would be inspired to

renewed diligence. This assurance has not been absolute, even in the recent past, and many consuls have retired because of a conviction that influence which they did not possess was necessary to secure appointment to the more important posts. Proposed legislation has also prohibited consideration of the political affiliations of candidates.

All of these proposals are aimed to conserve the good results achieved by executive orders promulgated as temporary expedients to overcome the deficiencies of legislation. The improvements in the service have remedied many preexisting evils, and consular reform has receded from the lime-light of 1906 to make way for public matters of greater urgency. Although it is more difficult to awaken public sentiment for the maintenance of an advance once achieved than it is to arouse an active opposition to glaring public evils, American trade organizations are not allowing consular questions to pass unnoticed, as is evidenced by the report of the House Committee on Foreign Affairs on the improvement of the foreign service, submitted in 1912.[1]

ORGANIZATION AND SUPERVISION OF THE SERVICE IN 1913.

The service as reorganized is outlined by table 81, which states the number of Consuls-General and Consuls by classes and gives the salary of officials of each class in 1912:[2]

TABLE 81.—*Number by classes and salaries paid United States consuls-general and consuls, 1912.*

	No.	Salary.		No.	Salary.
Consuls-General:			Consuls:		
Class I	2	$12,000	Class I	1	$8,000
II	6	8,000	II	1	6,000
III	8	6,000	III	9	5,000
IV	12	5,500	IV	14	4,500
V	17	4,500	V	22	4,000
VI	9	3,500	VI	34	3,500
VII	3	3,000	VII	55	3,000
			VIII	60	2,500
			IX	45	2,000

In addition to these 16 grades, there are 13 other classes of employees in the service, with the following designations: Consul-general at large, and deputy consul-general, vice consul-general, deputy consul-general, vice and deputy consul, vice consul, deputy consul, consular agent, consular asssitant, interpreter, student interpreter, marshal, and

The varying functions exercised by these officers are scarcely indicated by their titles. To each of the consuls-general at large a definite district is assigned, and he must visit every consulate within his

[1] Report No. 840, 62 Cong., 2 sess. This report also contains a history of the consular reform movement, sample examination questions, etc.
[2] The Department of State. Oct. 15, 1912, pp. 26–27.

district at least biennially. Consuls-general at large may also be utilized, when the President has reason to believe the business of any consulate is being improperly conducted, to supplant a consul-general or consul for a period of not more than ninety days, during which the official supplanted is under suspension.

Consuls-general are in reality merely consuls with a special title.[1] Ordinarily there is only one consul-general in a country, although there are 8 exceptions to this rule.[2] The consul-general, when there is one, is usually located in a large city and theoretically has supervision over the consulates located in specified surrounding districts. This supervision, which extends to the enforcement of consular regulations, and is maintained only through the medium of correspondence, is in large measure a nominal one. In the case of 7 consuls-general whose duties are light, economy has dictated a union of diplomatic and consular functions in the same official.

Consuls are much more numerous than officers with the higher title and possess the same powers, except in so far as the latter have jurisdiction over the former. In each of the 47 foreign nations in which there is an American consular officer, an official of the grade of consul is stationed, and in 9 relatively unimportant countries there is no consular officer with a higher title.

Vice consuls-general and vice-consuls are always attached to the office of a consul-general or consul, and in no case have charge of independent offices, except in the absence of their superiors. Their appointment is made by the latter, subject, however, to the approval of the Secretary of State. They have no specified duties to perform and are vested with no powers when the superior officer is at his post. In many places it is difficult to secure American citizens to fill these positions, and although Americans are favored, in the great majority of cases foreigners must be appointed. While no salary attaches to the vice-consular office, when the chief officer is at his post, it is customary to employ these officials as clerks. When the consul-general or consul is obliged to leave his post, the compensation of his subordinate is usually fixed by mutual agreement, and in the absence of an agreement one-half of the officer's salary is paid to the substitute.

Deputy consuls-general and deputy consuls are officers of even less rank, who may perform consular duties, usually of a routine character, either in the presence or absence of their superior, but under his supervision. They are never qualified to take complete charge of an office. They are appointed in the same way as are vice-consular officers, and no special allowance is made for their compensation, but they are usually employed as clerks. At most posts the duties to be performed

---

[1]Van Dyne, *Our Foreign Service*, 130.

[2]Belgium has 2; China 5; France 2; Germany 6; British Dominions 12; Japan 2; Mexico 2; Turkey 4.

admit of the combination of the vice and deputy functions in a single officer.

Consular agents are stationed at outlying-posts, within the various consular districts, and are responsible to the consul-general or consul in charge. With the Government they have no direct relations. Their appointment is made in the same way as that of vice and deputy officers and the same requirement obtains with respect to the appointnent of Americans.

The consular assistants, appointed only after examination, and emovable only for failure to perform their duties, which are clerical ı nature, receive salaries ranging from $1,000 to $1,800, depending ı length of service.

The interpreters, who are stationed chiefly in Oriental countries,[1] ceive salaries ranging from $800 to $3,650. Of these, 19 have been omoted from the corps of student interpreters. Of the latter, there : 22, located in China, Japan, and Turkey, who are appointed only er examination and receive a compensation of $1,000. Both interters and student interpreters sometimes also hold minor appointnts[2] in the service, while they are serving as interpreters or carrying the studies which will eventually fit them for their work. A relaly small number of promotions have been made of consular assist: and interpreters to higher positions.

[arshals serving in China and Turkey are connected with the conr courts maintained in those countries.

ıe general jurisdiction of the Secretary of State over this force of ›nal "trade scouts" is exercised more specifically by the Director e Consular Service. The Consular Bureau, with a chief and assischief, handles the consular correspondence of an administrative cter, while other correspondence is handled through four divisions, n charge of certain geographical areas. The Division of Informarepares and distributes to the service commercial and other corıdence and documents in connection with foreign relations. oreign trade advisers maintain an office, formerly known as the ı of Trade Relations, and prepare instructions to consular for reports to be printed by the Department of Commerce, and transmit such reports, when received, to the latter Departnd to other branches of the Government, and compile commercial ıtion for the State Department. The connection with the of Foreign and Domestic Commerce, in the Department of rce, which in the first place makes requests for reports on certain and later publishes the reports received, is maintained in this correspondence with consular officers being handled through e Department.

[1] China, Japan, Siberia, Syria, Korea, Persia, Morocco, Egypt, and Turkey.
[2] As vice or deputy officers, or as marshals.

The instruction of consuls begins in Washington. Secretary Root, who was a zealous advocate of efficiency in the service, transformed this proceeding from a mere formality into an educational course.

Once at his post, the official is governed by the *Consular Regulations*, first issued by the Department in 1838,[1] and reissued from time to time. "General and Special Consular Instructions" are issued at frequent intervals in the shape of circulars, digests of which have been published. In addition to the direction thus exercised from Washington, consular officers are subject to the "general supervision" of the American ambassador, minister, or chargé d'affaires in the country where they are stationed.

EXTRATERRITORIAL AND OTHER FUNCTIONS OF CONSULS.

Only those functions of consular officers which relate to commercial matters, which indeed are their chief concern, are to be discussed here, and those which represent the earlier conception of the purpose of the service require but brief mention. Consular officers have had, from the earliest times, certain duties with respect to the safety of American citizens either traveling or resident abroad. They are expected to maintain and promote all rightful interests of Americans, affording them such protection as they are by treaty and usage entitled to. At the principal consular offices a register of the American citizens resident in the districts, on the basis of which certificates of registration are issued, facilitates the work of protection. For travelers in certain jurisdictions, passports are issued or viséed.

The extraterritorial functions devolving upon consuls bear a definite relation to the protection of American citizens, and are of great commercial importance. Extraterritoriality is an ancient right, claimed by Christians in non-Christian countries, by virtue of the differences in morals, customs, and institutions between the Christian and non-Christian countries. It involves immunity from the law of the latter in favor of the law of the former, which is controlling as regards persons from Christian countries. Consular courts are the medium for the enforcement of the rights of extraterritoriality. The right, which is granted only by treaty, involves a varying degree of power. The United States has usually sought to secure jurisdiction not only over suits between Americans, but over all suits in which an American citizen is defendant. This jurisdiction includes civil cases and sometimes extends to criminal actions as well. Extraterritorial rights were first secured with the Barbary powers,[2] when the sole reason for the demand of such rights was the importance of our commerce with those

[1]Early instructions were issued at infrequent intervals in the form of circulars, but there was little actual direction of the service. Secretary Livingston, in 1833, issued a short and incomplete set of regulations in an effort to make consular procedure more uniform and the conception of duties more definite.

[2]Between 1795 and 1836, with Algiers, Tunis, Tripoli, and Morocco.

nations. Subsequently, extraterritorial rights were secured by treaties with a number of other countries,[1] and are still exercised in Borneo, China, Korea, Siam, Turkey,[2] Persia, Tripoli, Morocco, and Muscat. The judicial functions thus exercised by consular officers necessitate, as indeed the rules of the Board of Examiners now require, that ıppointees to posts in those Oriental countries where consular courts re held shall be familiar with at least the rudiments of law.

Consular officers are not concerned alone with the laws relating to merican citizens abroad, but are also charged with assisting in the ıforcement of certain other laws. Of great importance are their duties th respect to the public revenue laws, which relate to the certification invoices covering merchandise valued at more than $100 and shipped the United States. Their duties sometimes also involve the certifiion of landing certificates, which testify to the entry into foreign ntries of goods coming from the United States in bond. The disrge of the bond by the presentation of the landing certificate ves the payment of duty in the United States. Moreover, returned erican merchandise is exempt from duty in the United States, if its acter is properly certified to by the consular officer.

nsular officers are also concerned with the enforcement of the imation laws through their endeavors to prevent the emigration the countries where the consuls are stationed) of persons belong- the excluded classes. When they learn of the emigration of such ıs they immediately notify Washington. Medical representativse Public Health Service are stationed at various consulates for spection of persons departing for the United States.

onnection with the merchant marine, consuls possess important ns. Consuls ship and discharge American seamen, provide relief nsportation for those that are destitute, settle disputes between and seamen, investigate charges of insubordination, and send rs home for trial. When American vessels are stranded, conficers render such assistance as they can, and in the absence of ter or other properly qualified person, take charge of wrecks and when permitted to do so by law or treaty. In the performance luties with respect to the conduct of ships in port and the legal of the persons aboard, the consuls are assisted by the law that ships' papers be left with them while vessels are in port. rotect the health of American seamen and assist in keeping m American seaports in two ways: first, by issuing to vessels r the United States bills of health certifying to the condition t, vessel, crew, passengers, and cargo, with respect to health ry matters; and second, by making weekly reports of the

30); Muscat (1833); China (1844); Borneo (1850); Siam (1856); Persia (1856); Madagascar (1867); Samoa (1878); Korea (1882); Zanzibar (1886); and Tonga

ixed courts at Constantinople and Cairo.

sanitary and health conditions of the foreign ports where they are stationed. On the outbreak of any epidemic or of a contagious disease, these reports are made immediately by telegraph or cable.

ACTIVITIES OF CONSULAR SERVICE IN PROMOTING TRADE.

The chief commercial functions of the consul are those relating to the promotion of the foreign trade. Although this aspect of the service is of comparatively recent origin and represents a gradual growth, it has received a more extended development than any other, and is now recognized as by far the most important consular function.[1] The United States was formerly less anxious to follow the example set by England and France and make the American consul an "envoy of trade," because American manufacturers were not interested in the foreign market. Even now the complaint is made that American business men are unappreciative of the possibilities of foreign trade. The consul-general at Birmingham, England, reported[2] in 1912 that American manufacturers have a reputation, in times of industrial activity, for neglecting foreign markets in two ways: (1) by careless inspection, due to the rush in getting orders out; and (2) by meeting the domestic demand first and pursuing dilatory methods with respect to the foreign trade. A further reason for the failure to utilize American consuls in promoting trade lay in the fact that much of the export trade has consisted in raw materials and agricultural products which readily found a market without the stimulus of consular assistance. That situation has largely changed, and the consular service is measuring up to the consequent demands made upon it.

Trade promotion is facilitated by the collection and compilation of statistical and other data. The statistics which were at first collected did not relate directly to trade and were for the benefit, not of American exporters, but of various government departments, such as the Treasury Department, which required information concerning foreign prices to assist it in the levying of import duties.

Prior to the law of 1856, consuls had been utilized for the collection of commercial information, which appeared in three digests of commercial regulations in foreign ports, and in a series of reports treating of the commercial relations of the United States with foreign countries. The three digests, published in 1819, 1824, and 1833–36, were designed to facilitate the trade thus carried on. The series of reports referred to, although not primarily intended to aid commerce, but rather to get foreign prices for the Customs Service and commercial information which would assist Congress in tariff legislation, developed, however, into the annual volume of *Commercial Relations*, which became a useful publication in the interests of trade promotion. Not until 1842, under

[1] Van Dyne, *Our Foreign Service*, 157.
[2] *Daily Consular and Trade Reports*, IV, 1912, p. 1308.

the secretaryship of Daniel Webster, was a "recognized use"[1] made of the reports of the foreign service in the preparation of this publication. Even after that time the reports of the customs office and foreign and domestic statistical publications continued to be the chief sources from which the volumes were compiled.

Although four volumes were issued, covering the year 1855, the first of the *Commercial Relations* volumes proper was that issued for 1856, pursuant to the reorganization act. One of the four volumes published in 1855 reproduced for the first time the text of the consular reports, which came to occupy more and more space in the volumes thereafter published annually, until, beginning in 1869, they comprised the whole. These reports were at first comparatively ineffective, because the nature f the information to be submitted was left to the discretion of each onsular officer. A beginning in the direction of uniformity was made 1871, and following the issuance of the *Consular Regulations* of 1874, eater emphasis was placed upon reports concerning trade with the nited States. There has been a marked change in the character of e volumes since 1890 in the direction of making the avowed object their publication the provision of such information as would assist nerican manufacturers and exporters in developing foreign commerce. The consular reports incorporated in the annual volumes, and in ir successors, the monthly and daily reports, involve general reviews trade conditions in foreign countries, submitted by the chief con- ır officers in each, and detailed statements of local conditions by ials in charge of smaller districts. These reports indicate what l of goods the people of the locality want, how shipments should be ced, the demand for American products during the previous year, reasons why it has not been larger, and the means by which it may ncreased. They state, moreover, the general business conditions and ish statistics of trade with the United States and other countries. ie last annual volume appeared in 1909. The following year, when ecretary of Commerce and Labor called attention to the fact that mited edition authorized minimized the usefulness of the report, h he moreover characterized as "little known and comparatively iced by the public," and as being of "doubtful value" in view of rompt publicity given through the *Daily Consular and Trade ts*, the implied recommendation was immediately acted upon, and ture publication of the annual volume was ordered to be dis- ued.

il 1879, consular reports were published only in the annual vol- except that short abstracts were from time to time given to ss. In that year, however, the first of a number of miscellaneous was issued, dealing with trade, labor, and industrial conditions

[1]Jones, *Consular Service of the United States*, 62.

in Europe. In 1880 the first direct demand made upon the State Department by manufacturers for aid from the Consular Service came from cotton manufacturers, who requested information concerning the foreign market for cotton products. Chambers of commerce forced upon Congress the consideration of a more frequent publication and distribution of consular reports, and during the same year their issuance monthly was authorized. This aroused an increased activity in the State Department, and among the consular officers as well. In 1910, long after daily reports had come into existence, the monthly reports, which contained no other matter than that appearing in the more frequent and more serviceable edition, were discontinued. *Daily Consular and Trade Reports* were first published in January 1898 as a result of a demand for more frequent information on the part of business men. Beginning with the year 1906, the daily reports have contained, under the heading "Foreign Opportunities," information as to the specific wants of foreign buyers which American exporters can immediately make an effort to supply. From 1910 to 1912, the edition grew from 10,000 to 20,000, the limit permitted by law, and the demand was still greater than could be supplied. *Special Consular Reports* are issued from time to time. Suggestive titles of recent publications in this series are: "Winning Foreign Markets, containing suggestions for extension of trade by American manufacturers and exporters," and "Commercial Courts in Europe."

As new opportunities for service in the dissemination of commercial information have presented themselves, a disposition has been shown to measure up to the possibilities. The most efficient informational service now rendered is probably that of the confidential bulletins and circulars, which are sent out only to those business men who have facilities and equipment to perform the service required. The information, distributed only in this confidential way, is often received from abroad by cable and transmitted to American business men with all possible expedition. During the fiscal year 1912, a total of 139 of these bulletins was issued, dealing with a variety of subjects limited only by the demands of trade the world over. The data collected by consular officers are published in still other forms, such as the "Foreign Tariff Notes," "The Tariff Series," "The World Trade Directory," "Packing for Export," and "Factors in Foreign Trade."

In numerous personal ways service to commercial interests is rendered by American consular officers, who may be reached directly through the mails. In their offices they keep lists of the representatives of American firms located in their districts, which enable them to bring together prospective buyers and sellers. Salesmen, moreover, are given personal introductions to the trade abroad. Through conferences with business men, consuls render efficient personal service

while on visits to the United States. A few enterprising consuls have, on their own initiative, exploited American products through the maintenance of reading rooms, information bureaus, and exhibits of samples.

In connection with the expositions and exhibitions which are held from time to time in various countries, consular officers render useful service. Besides extending to American manufacturers an official invitation to participate, these officers furnish specific information as to the rules and regulations governing exhibits.

Thus far the discussion of consular aid to foreign trade has related solely to exports, but in the matter of imports it is also possible for the service to be of assistance. In past years a serious situation developed, which not only diminished the public revenues, but nullified the efforts made by American importers to compete with foreign firms in the home market. Undervaluation frauds were perpetrated, whereby foreign dealers paid but a low customs duty in shipping to their branch houses in the United States, while invoices furnished American buyers bore the actual selling price of the goods and, under an ad valorem duty system, paid a higher import tax. Thus the foreign firm in the United States was able to undersell the American rival dealing in the same goods. A method of detecting undervaluations, which was developed in 1897 by the American consuls in the lace and textile districts of Germany and Switzerland, was subsequently extended to other manufactures, and while revenue frauds still require the attention both of the Customs and the Consular Services, an appreciable improvement has been made through the more efficient conduct of invoice certification. Consular aid to the importing branch of foreign trade is not limited to the prevention of customs frauds. Buyers sent abroad secure the personal assistance of the consul, and the reports which the latter makes inform importers of the industrial conditions in foreign countries and of the products which may be purchased there.

Business men testify to the value of the service rendered by consular officers in many ways. Letters of appreciation addressed to the Departments at Washington, the ever-growing demand for consular reports, editorials in trade journals, action of trade bodies; the demand that the efficient service that has been developed be conserved by the enactment of adequate legislation, all bear witness to the influence which the service has had in the development of the American foreign trade. Consuls can neither create nor maintain trade; they can at most only facilitate it. Their services are particularly effective in the establishment of commercial relations for the first time in a specific line or a new district, but after the beginning is once made the manufacturers' representatives are in a far better position than is the consul to expand the trade thus established. It is obvious that little assistance can be rendered by the service unless there is in the first place a keen desire

on the part of American manufacturers to enter the foreign market, finding expression in effective methods of exploitation.

On the basis of replies which he obtained from a questionnaire sent to representative manufacturing exporters, Dr. Jones concluded that indifference to the foreign trade and the failure of exporters to take advantage of the assistance offered, often evidenced by their employment of foreign commission houses, were factors which limited the aid that could be rendered; but that, on the other hand, "it is shown from conspicuous examples that when the exporter has the determination to enter the foreign market, and is ready to accept the aid of the consuls, great aid can be, and as a rule is, given by these agents." There is every indication that in the decade which has elapsed since this conclusion was reached the efficiency and practical usefulness of the Consular Service have both markedly increased.

CHAPTER XXXIX.

POLICY OF THE UNITED STATES TOWARDS SHIPPING AND SHIP-BUILDING.

Discriminating duties and shipping reciprocity, 295. Provisions of the acts of July 4 and 20, 1789, 296. Provisons of the reciprocity act of 1815, 297; act of 1817, 297; act of 1828, 297. Reciprocity treaties, 298. Discriminating tonnage taxes and customs duties, 299. The reciprocity clause in the act of 1884, 299. Tariff concessions and registry laws, 300. Aid to vessels in the coastwise trade and fisheries, 303. Legislation concerning seamen, 305. Ship subsidies, 1845–1872, 308. Partial revival of ship subsidies, 1865, 310. The ocean mail payment law of 1891, 311. The Navy and American shipping and ship-building, 313. The first iron warship, the *Michigan*, 315. The effects of the Civil War, 315. Decadence of the navy and ship-building after the Civil War, 316. Stimulating effect of Spanish-American War, 316. Summary of American shipping policy, 317.

The shipping policy of a nation can be determined only by an exami-ion of the attitude of the Government towards numerous questions ıting to the construction and operation of ships. It seems wise to sider separately the various elements that make up this policy. ile the earlier policies will be considered first, no strict chronological tment can be given, although related elements will be considered he sequence of their occurrence. The account will end with the elation of the whole by pointing out the effect of the various gov-iental activities and laws.

DISCRIMINATING DUTIES AND SHIPPING RECIPROCITY.[1]

ipping questions were among the earliest problems to occupy the tion of the first Congress. The perils of war and the inability of overnment of the Confederation to regulate commerce had caused ican shipping to fall "into decay and involved thousands in the t distress."[2] Congress quickly responded to appeals for help. rst provisions in aid of shipping were contained in the tariff act of , 1789, the second act passed by the first Congress, which pro-for a discrimination against foreign shipping by giving a reduc- the duties on goods brought to the United States in American The colonists had been accustomed to such legislation, for dis-ıting duties were authorized in most of the colonial charters, and ties had been utilized even by one colony against another. The was, moreover, in accord with the mercantile policy of Euro-tions and was regarded as a matter of necessity.

infra, chap. xli, in which this subject is discussed briefly by Dr. Huebner in connec- Tariff Provisions for the Promotion of the Foreign Trade of the United States."
n State Papers, *Commerce and Navigation*, I, 6.
er, *Government Policy in aid of American Shipbuilding* (A thesis, University of Pennsyl-ıdelphia, 1911).

The tariff of 1789 provided a reduction of 10 per cent in the duties levied on imports, when the goods were brought in American ships, and this principle was retained as a constituent element of American shipping policy for a quarter century. In the tariff of 1794 the form, but not the nature, of the discrimination was changed, when the duties named in the tariff were made applicable to goods imported in American ships, while a 10 per cent increase was provided for commodities arriving in foreign bottoms. In this form, discriminating customs duties have been provided in almost all subsequent tariff laws, although, practically speaking, they have long since ceased to be operative.

The discrimination given the import trade from the Orient was greater. Deprived of the opportunities of commerce with British colonies which they had theretofore enjoyed, American merchants turned to the Orient to trade unrestricted by navigation laws. The first tariff act encouraged this trade by making the duty upon tea (then the principal East India commodity imported into the United States), when brought direct from China or India in American ships, from 6 to 20 cents per pound, while the same tea imported in American ships via Europe was required to pay from 8 to 26 cents and, if in foreign ships, from 15 to 45 cents. Upon all other Oriental products, imported in foreign ships, an ad valorem duty of 12.5 per cent was levied, which was almost double the rate on similar goods imported in American bottoms. These discriminations were sufficient to exclude foreign shipping from the Oriental import trade. Similar provisions were incorporated in tariff laws until as late as 1830. In 1832 teas brought directly from the Orient in American vessels were placed on the free list, and in 1842 a 10 per cent discrimination in the duties was provided against Oriental goods brought in foreign vessels. From 1862 to 1882 a 10 per cent additional duty was levied on eastern cargoes shipped from west of the Cape of Good Hope.

Discrimination of another sort, proposed by James Madison and adopted July 20, 1789, in the third act of the first Congress, involved the tonnage duties levied upon ships arriving at the ports of the United States. A decided preference was given to American shipping, and a considerable preference also to vessels built in the United States but partly owned by foreigners. The tonnage duties were as follows: On vessels built and owned in America and on foreign-built vessels owned by Americans, on and after May 29, 1789, 6 cents; on vessels thereafter built in the United States but partly or wholly owned by foreigners, 30 cents; on all other vessels, 50 cents. Discriminating tonnage duties were continued by the tariff act of March 27, 1804, which placed foreign shipping at an even more serious disadvantage. A new duty, known as "light money," amounting to 50 cents per ton, was authorized to be charged on all foreign ships entering the ports of the United States. This doubled the previous tonnage tax levied on foreign

vessels. Light money was collected, until 1830, since when the lighthouse service has been maintained from the Treasury funds without a specific tax. The net result of these discriminations was a tremendous growth of the American shipping industry. Both the foreign and coasting trade passed very largely into the hands of Americans, and there was an immediate and rapid growth in the merchant marine.

The treaties which brought peace at the close of the war of 1812 ushered in a new policy which seemed to be a departure in shipping egislation. While it did not immediately result in a decline of shipping nterests, it has been designated as a forerunner of the measures to which have been attributed the transfer of the foreign trade from merican to foreign bottoms. This policy first appeared in the act of larch 3, 1815, which removed discriminating duties, both tonnage and port, in favor of American vessels in the foreign trade, so far as conrned ships carrying goods from the country under whose flag they iled. The repeal was to take effect with respect to any nation, when discriminating or countervailing duties which operated to the disadntage of American shipping had, to the satisfaction of the President, n abolished.

he commercial convention of July 3, 1815, removed the restrictions n the East India colonial trade, but permitted Great Britain to ılate the West India trade as it saw fit. Reciprocal trade with ish countries in Europe was secured, the same tonnage duties on other's vessels were to be charged, and no discriminating duties ıvor of home shipping were to be permitted on imported goods. treaty went beyond the terms of the act of March 3, 1815, and was lomatic victory for England. It permitted British ships to engage e profitable triangular trade between England, the United States, he West Indies, whereas American ships continued to be excluded the British West Indies. Shipping and ship-building activities ienced a setback which aroused Congress to action. British ships from ports from which American ships were excluded were sent American ports, but it was only after a prolonged struggle that Britain was induced to grant real reciprocity of trade.

policy introduced by the act of 1815 was continued in that of 1, 1817, prohibiting the importation into the United States of in vessels other than those of the United States and of the procountry, or the country through which they were first shipped; se restrictions were to apply only to those countries pursuing ır policy toward the United States. This law, it will be noticed, offer reciprocity for the indirect trade, but merely prevented ation in it, even with a payment of discriminating duties, by ations which applied similar restrictions to the United States. eciprocity policy reached its final extension in the act of 1828, g that all foreign nations that would grant a similar privilege

to the United States should be allowed participation in the indirect trade. British ships might, henceforth, carry French goods to the United States without the payment of discriminating duties, providing American ships were allowed the same privilege as between France and England. The policy of maritime reciprocity was introduced by treaty and by proclamation as well, "upon satisfactory evidence being given to the President of the United States by the government of any foreign nation, that no discriminating duties of tonnage or import are imposed or levied in the ports of the said nation, upon vessels wholly belonging to citizens of the United States, or upon the produce, manufactures or merchandise, imported in the same from the United States, or from any foreign country." Among the different jurisdictions which, between 1816 and 1829, accepted partial reciprocity were Great Britain, Norway-Sweden, France, Holland, Prussia, Hamburg and other German cities, Russia, Algiers, Brazil, and Central America. The policy of complete reciprocity has had only temporary suspensions, designed either to favor particular nations or to secure the removal of restrictions placed upon American vessels.

The real result of the introduction of shipping reciprocity has been a debatable question. The friends of the measure have insisted that what American ships lost of their own carrying trade they gained of the commerce of other nations. While the percentage of the American foreign trade carried in American ships declined from 92.5 in 1826 to 66.5 in 1860, it is nevertheless true that 1860 marks the year of the largest tonnage of American vessels which entered and cleared in the foreign trade of the United States until 1900. The foreign tonnage engaged in this trade jumped from 10 per cent of the total entrances and clearances in 1821 to 23 per cent in 1831. In 1832 it was 29 per cent, which was likewise the figure for 1860. It was not until after the Civil War that the decline in American shipping engaged in foreign trade took place, and although participation in the foreign trade of the United States was allowed to the vessels of other nations, the American shipping industry was by no means demoralized.

Many modern writers, however, criticize the assurance of the early lawmakers which led them to believe that the skill and experience of American ship-builders and seamen would enable the United States, after having abolished all discriminating duties, to induce European powers to do the same. Those who regard the reciprocity policy as a real cause of the decline of the American foreign carrying trade still urge a return to the policy of the early days of the Republic. The effort to reestablish the discriminations which were a heritage from the days of the Cromwellian "Navigation Laws" has, however, been fruitless. Long before the development of the spirit of international comity, practically all nations had adopted shipping reciprocity, which is looked upon as one of the contributions of American statesmen to the present

:ommercial system of the world. When the possibility of reprisals and he necessity of abrogating all commercial treaties now in force are conidered, it is apparent that, as Mr. E. T. Chamberlain, Commissioner f Navigation,[1] says, a readoption of the old policy of discriminating uties is "hopelesssly impracticable." The wisdom of his judgment substantiated by recent experience.

The tariff of 1913 attempted a return to the earliest form of discrimi-.tion by providing a 5 per cent discount of the duties established, if ods were imported in ships of American registry. It was stipulated, wever, that nothing in this provision was to "be so construed as to :ogate or in any manner impair or affect the provisions" of any exist- treaty. Upon the advice of the Attorney-General, the Treasury partment ruled that this provision was inoperative, because the :ount could not be given without impairing the treaty rights of other ons.

/hile tonnage taxes, like customs duties, are now levied on the same s upon ships of all nations engaged in the foreign trade, they have so modified as to encourage foreign commerce. The act of 31, 1830, had repealed these taxes, not only as to American ships, ılso as to the vessels of all nations which the President was satis- ıad abolished their discriminating or countervailing duties with ct to the United States. The need of revenue caused a re-lishment of tonnage taxes on all vessels in 1862. Changes were in the rates from time to time, and in 1870 they were removed as ısels in the American coasting trade and fisheries. In 1884 and :he existing rate of 30 cents per ton net register per year, levied vessels in the foreign trade, was changed to 6 cents for each with a maximum payment of 30 cents per ton per year. In the foreign trade—from North America, Central America, the West the Bahamas, and the Caribbean coast of South America— e was to be 3 cents per ton, with a maximum of 15 cents per year. an sailing-vessels had been discriminated against under the old :ause they paid the same tax as steamships, although they were : to make so many trips annually as steamships. The tariff of anted further relief to the nearby foreign trade by reducing the 2 cents per ton per entry, with a maximum of 10 cents per year. aw of 1884 contained a reciprocity clause which is a further ›n of the liberal international policy of the United States. The ıt was authorized to "suspend the collection of so much of the ein imposed, on vessels entered from any foreign port, as may :ess of the tonnage and lighthouse duties, or other equivalent xes, imposed in said port on American vessels by the govern- the foreign country in which such port is situated." This ›re little fruit, vessels from the Netherlands, the Dutch East

[1] *Report of U. S. Commissioner of Navigation, 1909*, p. 65.

Indies, Copenhagen, Panama, Colombia, and Ontario being the only ones which, in 1909, came within its provisions. A few other, mostly unimportant, jurisdictions had at various times received reciprocal treatment under the law. For a while vessels from Germany were exempted from the tax, which was, however, reimposed because of charges levied in German ports. As the Commissioner of Navigation pointed out in his reports from year to year, the bargain which was offered by the United States was a one-sided one, in view of the fact that American vessels have been carrying, in recent years, only about 10 per cent of the nation's foreign trade. If Great Britain had abolished its lighthouse dues, when this reciprocal provision was in effect, the United States would have lost over $300,000 a year in tonnage taxes, while American shipping would have benefited to the extent of barely $8,000. The reciprocal tonnage-tax exemption was, however, abolished by the tariff of 1909.

The low tonnage duties thus levied upon vessels in the foreign trade are the only taxes now placed upon shipping by the United States Government, which has not only encouraged shipping in this way, but has steadfastly refused to permit the various States to place such impediments as license or tonnage taxes upon interstate and foreign shipping. The States are permitted, however, to tax ships as property belonging to their citizens.

TARIFF CONCESSIONS AND REGISTRY LAWS.

National legislation has since 1870 also encouraged ship-building by tariff concessions on foreign materials used in the industry. Such legislation was first enacted in the post-bellum period, when the business of American ship-builders was suffering great depression. The tariff of 1872 allowed the free importation of materials for building and equipping wooden vessels which were to engage in the foreign trade and in the trade between the Atlantic and Pacific ports of the United States, but the inhibition placed upon engaging in the coastwise trade (except between the Atlantic and Pacific coasts), for more than two months in any one year, made the concession practically valueless. Americans investing capital in sea-going vessels, even when they contemplated engaging in the foreign trade, kept in mind the possibility of falling back upon the coastwise trade and did not care to be bound down by the free importation restrictions. The same tariff also provided that all foreign articles designed for the repair of American ships engaged exclusively in the foreign trade, of which there were comparatively few, were to be admitted duty free. This legislation was the forerunner of more liberal concessions. In 1884 a drawback was given of the duties paid on American-built ships which are subsequently exported, the United States, however, retaining 10 per cent of the drawback. The McKinley tariff of 1890 extended the free importation

rovisions to iron and steel ships. The restriction upon engaging in he coastwise trade, however, continued to make these concessions of ttle practical value until 1909, when the time for participating in the oastwise trade was increased to six months, in accordance with the commendation made in 1905 by the Merchant Marine Commission. he Panama Canal act of 1912 completely removed the restriction, rrying to completion the policy inaugurated forty years before.

Legislation providing for the registration, enrollment, or licensing of nerican ships has been designed for the encouragement of the ship- ilding industry. By the law of September 1, 1789, registration the foreign trade was confined to vessels built and owned in the ited States, and officered by American citizens, an exception being le in favor of foreign-built ships which belonged to American citi- on and after May 15, 1789. Enrollment was provided for vessels he coasting trade and fisheries and, beginning in 1793, vessels of r 20 tons burden, so engaged, were "licensed." An amendatory passed in 1792, admitted to registry, under the same conditions, ls captured in war by Americans and lawfully condemned as prizes, rfeited for a breach of the laws of the United States. This legis- contained the essential features of the registry policy followed century and a quarter, viz, that the American flag was to fly over vessels only which had been built in the United States and were l by its citizens.

a law passed in 1852, American registry was opened to vessels ad been wrecked on the coast and had undergone repairs in Amer- orts amounting to three-quarters of their value. The facts that was ambiguous and that repairs so extensive as those contem- would ordinarily have to be made in the United States, regard- the offer of American registry, were responsible for the with- of the privilege in 1906. The law had been utilized, although any considerable extent, every year since its passage. The so admitted, between 1898 and 1906, was greater than in any period of like duration, but never reached higher in any one n it did in 1898, when the total addition was 14,304 tons.

the Civil War, Congress was pressed to lessen the requirements gistry laws. During the war the northern fishing fleets had ost driven from the seas by southern privateers, and ships in the foreign trade had been transferred to foreign registry the fate which befell the fishing vessels, or sold at panic foreigners. A total tonnage of 774,652 (between one-quarter hird of the total registered tonnage of 1861) was sold abroad 2 to 1865. Although urged to do so, Congress refused to American registry such shipping as southern privateers had the merchant marine of foreign nations. It was urged that citizens to avail themselves of all the advantages conferred

by our Government during peace, and escape all the risks of supporting it during war, by placing their property at such times under the protection of a foreign flag, would be a dangerous precedent to establish."[1] Exceptions to this policy were made, however, by special acts readmitting some of the alienated tonnage.

Moreover, in a similar way, from time to time, the privilege of American registry was extended to a considerable tonnage of foreign-built ships. This practice began on a small scale in 1824, and the highest tonnage ever admitted in any one year before the Civil War was 4,607 in 1859. Thereafter the average yearly tonnage admitted was larger than before the war, but the high figure of 1859 was not again reached until 1890. The practice achieved particularly large results at the time of the Spanish-American war. From 1898 to 1901 a total tonnage of 103,302 was admitted by special acts, which, however, is largely explained by the nationalization of Porto Rican and Hawaiian vessels.

A considerable tonnage has been renationalized under the act of March 3, 1897, which readmitted to American registry vessels sold to foreigners and subsequently transferred to citizens of the United States, providing that, in the meantime, there had been no enlargement of the vessel or change of build outside of the United States. This act was another indication of the tendency to remove the restrictions upon American registry.

Subsequent to the Civil War there was an agitation for a general modification of the registry laws with respect to ships of foreign construction. The advocates of "free ships" argued that Americans should not be denied the privilege of securing in the English yards up-to-date ships which could be bought for at least one-third less than the cost of construction in the United States. They hoped thereby to build up the shipping industry and thus, eventually, to create a demand for the output of American shipyards. They were opposed, however, by the ship-building interest, which had its way until 1912, when, in the Panama Canal act, admission to American registry, for participation in the foreign trade and in the trade with the Philippines, Guam, and Tutuila, was granted to vessels not more than five years old and constructed abroad, owned entirely in the United States. The agitation for free ships was successful in 1912, when the Secretary of Commerce and Labor urged the passage of the bill on the ground that a merchant marine was of the utmost importance to the United States and that it was futile to hope for its construction in American yards without greater subsidies. Congress being unwilling to extend the subsidy policy, he pointed to the undesirability of longer doing without a merchant marine in the vain hope that the concomitant advantage of American construction might also be enjoyed. The "free ship" law

[1]House Report No. 28, 41 Cong., 2 sess., I, p. xi, *Report of the Lynch Committee on Causes of the Reduction of American Tonnage.*

was designed to improve the Americant merchant marine by the addition of modern foreign-built steamships. The five-year age limit was provided, in order to prevent the transfer to American registry of old steamers, which foreign owners might readily dispose of, in order to secure more efficient and modern craft.

The repeal of the provision that foreign-built vessels admitted to American registry must not be more than five years old was recommended by the Secretary of Commerce in March 1914, but the bill giving effect to the recommendation was not passed by Congress until after the outbreak of the European War. The law of August 18, 1914, "though passed under stress of war, was, in fact, an inevitable development in the change of national policy which under ordinary conditions would have been effected as soon as Congress could have turned its attention to the subject."[1] Between August 18 and November 5, 1914, a total of 80 ships, with a gross tonnage of 278,374, took advantage of the provision. The President was authorized to, and did, suspend until September 4, 1916, the requirements as to survey, inspection, and measurement of foreign-built vessels admitted to American registry.

Although Porto Rican and Hawaiian vessels were admitted to the American merchant marine, the Philippine vessels were treated somewhat differently. Foreign vessels have always been permitted to engage in the trade between the United States and the Philippine Islands. Under the act of April 15, 1904, the coastwise restrictions were not to be applied to trade between Philippine ports until Congress authorized the registry of vessels owned by the inhabitants of the islands, and the Government of the islands was authorized to adopt and enforce regulations for the transportation of merchandise and passengers between ports in the archipelago.

While the American registry laws still restrict the privilege of flying the American flag to vessels owned by "citizens of the United States or a corporation organized under the laws of any of the States thereof," there is no prohibition upon the ownership abroad of shares in corporations, which have practically supplanted individuals in the control of transportation on the sea as well as on the land. "The requirement of American ownership," it has been pointed out, "is thus no real restriction upon the development of our shipping."[2]

AID TO VESSELS IN THE COASTWISE TRADE AND FISHERIES.

The American coastwise trade, as is true of the coasting trade of many other maritime nations, is reserved to national shipping. The earliest registry laws did not confine the coasting trade to the vessels of the United States, but the privilege which foreign ships possessed of

[1] *Report of U. S. Commissioner of Navigation, 1914*, p. 30. [2] *Ibid.*, 1909, p. 59

engaging therein was of doubtful value, because of the heavy discriminating tonnage taxes and "light duties." Tonnage taxes were, under the early laws, levied but once a year on American vessels engaged in the coastwise trade, while foreign vessels which sought to enter this trade had to make a higher payment, and at every entry. There were no tonnage duties on vessels engaged in the coasting trade from 1830 to 1862, and those established in 1862 were repealed in 1870.

When Congress, by the adoption of a policy of maritime reciprocity, lessened the restrictions on the foreign trade, it tightened the grasp which American shipowners already had on the coastwise trade by adopting, in 1817, a prohibition, which has ever since remained, against the participation of foreigners therein. A similar prohibition, enacted in 1808, had been repealed the following year. The policy of restricting this trade not only to American shipping, but to American-built ships, has been so far amended as to permit foreign materials to be imported free of duty for use in building ships for the coastwise trade. The "free-ship" acts of 1912 and 1914 do not, however, apply to vessels in the coasting trade.

The reservation of the coasting trade to American ships has been the mainstay of the merchant marine and the ship-building industry of the United States since the Civil War. In the years before the Civil War the shipping engaged in the domestic trade was by no means unimportant. In 1815 the enrolled tonnage in the domestic trade was about five-eighths of that engaged in the foreign trade; but before many years the enrolled and licensed vessels exceeded the registered vessels in tonnage. In 1861, the banner year in the annals of American shipping in the foreign trade, the domestic tonnage exceeded the foreign by about 10 per cent. Conditions have changed materially since then. In 1913 the registered tonnage was less than one-sixth of that engaged in the coastwise trade.

The coastwise trade is expanding as a result of the opening of the Panama Canal, which has brought the two coasts nearer each other and made it possible for water lines to compete more extensively with rail carriers for intercoastal traffic. Railroad ownership of vessels operating through the canal was absolutely forbidden, and after July 1, 1914, railroad control of competing water carriers was prohibited, except when the Interstate Commerce Commission is of the opinion that existing railroad-owned steamship service "is being operated in the interest of the public and is of advantage to the convenience and commerce of the people, and that such extension (of time during which the service may be continued) will neither exclude, prevent, nor reduce competition on the route by water under consideration."

Of the American fisheries, which are considered elsewhere in this volume, little need be said here. In the early maritime system of the United States they were of fundamental importance, not only because of the tonnage involved and the lucrativeness of the employment, but

also because of the demands which they made of ship-builders and the training which they afforded for the development of seamen for the merchant marine and the navy. Congress recognized this importance, first by drawbacks on the duties paid on salt used in curing fish, and later, in 1792 and 1794, by bounties, to be divided between ship-owners and fishermen. In 1817, after the bounties had begun to be large in amount, a law was passed for the purpose of confining their benefits more definitely to American citizens. Thereafter the officers and at least three-fourths of the crews of fishing-vessels were required to be Americans.

The bounties were repealed in 1866, when the tonnage engaged in the fisheries had suffered a severe decline due to the perils of war and to the demand made by the navy for seamen. The tonnage engaged in the fisheries was greater in 1862 than ever before or after. While the decline of the fisheries is not attributable solely to the discontinuance of the bounties, that has been regarded as one of the contributory causes.[1] The salt drawback was again resorted to in 1866, but it did not greatly encourage the fisheries, and it is now an unimportant item. The tonnage-tax provisions relating to the coasting trade were applied to vessels in the fisheries, which thus paid lower tonnage taxes than did ships in the foreign trade in the early days. Since 1870 there have been no tonnage taxes on vessels in the fisheries and the coasting trade.

LEGISLATION CONCERNING SEAMEN.

The Federal Government has always extended to seamen a degree of protection commensurate with the trying conditions under which hey labor. The very first law on the subject, "An act for the governnent and regulation of seamen in the merchant service," approved uly 20, 1790, constituted an advance over the practice of other nations t that time and established the main principles of American policy. t provided that written agreements between masters and mariners hould be drawn up, before the sailing of the ship, covering the length f service and the voyages to be made; that if the mate and the ajority of the crew should decide, while on a voyage, that the vessel ad become so leaky as to be unable to complete its voyage the captain ust put in to port to have an inquiry made in court as to the necessity f remedying the alleged defect; that mariners were entitled to demand nd receive their wages at specified times and places; that medical ests should be carried on ships bound to foreign lands; that vessels ound across the Atlantic should "have on board, well secured under ck, 60 gallons of water, 120 pounds of salted flesh meat, and 100 ounds of wholesome shipbread" for every member of the crew, "and like proportion for shorter or longer voyages."

In the years that followed there were frequent additions and amendents to this law, designed to improve the conditions of employment

[1] Marvin, *The American Merchant Marine.* 308.

aboard merchantmen. In 1792 the return to the United States of destitute seamen was provided for. During the first half of the nineteenth century, when foreign trade was participated in to a large extent by American ships, a number of acts were passed relative to the discharge of seamen abroad and the payment of wages in such cases. Corporal punishment aboard merchant ships was abolished in 1850.

A wholesale revision of the legislation relating to seamen was made in 1872. The scale of provisions to be furnished was enlarged and was required to be specified in the shipping articles; and a room for the protection of seamen from the cold was required to be provided. In accordance with British practice, shipping commissioners were provided for. The shipping commissioner was to provide an agency "where the master needing a crew and the seamen seeking a berth meet and make their contracts under the supervision of an officer of the Government, appointed for the protection of the seaman."[1] The law did not provide for an office for the use of the shipping commissioner, at Government expense, and his place of business became in practice a place of last resort, while middlemen really got the crews together. This not only involved an unnecessary cost but failed to prevent impositions on the seamen by boarding-house keepers and unscrupulous persons. However, in 1886, offices were provided in Federal buildings, wherever any vacant rooms were to be found, and the service of the commissioner further improved by the substitution of salaries for the fees which had theretofore been collected. Offices were finally provided at all points and at Government expense in 1897, so that the work of the commissioners was placed on a more satisfactory basis. Commissioners are located at all the principal ports, and contracts between seamen and masters are signed in their presence. A register of all seamen presenting themselves is kept by the commissioners, who furnish aid in securing employment, adjust disputes between masters, owners, and seamen and enforce laws respecting allotments and "shanghaiing." The American consul affords protection at foreign ports in a similar way. Although it is still possible for those on shore to secure a large part of the seamen's wages before they are earned, the men who follow the sea have benefited materially from the fact that a place is provided where, under Government protection, they may "secure employment and make contracts without the interposition of outside parties interested in securing, directly or indirectly, a fee from master or seamen, or both."

The tax formerly paid by seamen for the maintenance of a hospital service was removed in 1884, the funds thereafter being supplied for a while by the tonnage taxes and later by appropriations from funds in the treasury.

[1] *Report of U. S. Commissioner of Navigation, 1895*, p. 27.

Between the years 1895 and 1898, material improvements were made in the laws relative to seamen. The Frye law of 1895 first dealt with the question of the space provided for crews, and, as amended in 1897, required as a minimum 72 cubic feet of crew space per man and 12 square feet on the deck. Sailing vessels built after 1897 were to provide 100 cubic feet of crew space with 16 square feet on deck. These quarters were to be properly lighted, heated, ventilated, and drained. At that time, these forecastle accommodations were superior to those stipulated by other nations. Improvements in conditions were, however, made at a later date by the laws of foreign countries.

In the seamen's act, approved March 4, 1915, Congress provided for 120 cubic feet of crew space with 16 square feet on the deck in vessels thereafter constructed. The law of 1915 also provided for a hospital compartment on ships undertaking voyages of more than three days. Far-reaching provisions, designed to improve the conditions of labor at sea, contained in the same act, relate to the maintenance of watches, and the granting of holidays when in port. Not less than 75 per cent of the men, in each department of vessels of 100 tons and upward, navigating elsewhere than on rivers and smaller inland lakes, must be able to understand any order given by the officers of the vessel. Additional provisions were made for life-saving appliances. Payment of advance wages was prohibited. The minimum scale of provisions for seamen, which had been raised in 1898, was improved by the law of 1915 with respect to certain allowances as to provisions. "It has been the theory of our Government that the conditions of living on board American ships ought to be superior to those on foreign vessels, just as the standard of living among American laborers is higher than among foreign workingmen."[1] The act of March 4, 1915, however, so increased the cost of operating American vessels and so increased the difficulty of the successful competition of American with foreign vessels as to start a propaganda for the repeal or amendment of the law.

From 1813 to 1864 restrictions were placed on the employment of foreigners on American ships, but in the latter year, as a necessary measure for the maintenance of the merchant marine, the restrictions were removed. Thereafter American ship-owners, except as restricted by the ocean-mail-pay act of 1891, were at liberty to employ foreign seamen, the only requirement as to American citizenship being that applying to the master and all watch officers, including pilots. By the executive order of September 14, 1914, under the act of August 18 of that year, alien officers on foreign ships admitted to registry may serve until September 4, 1921, and vacancies may be filled, regardless of citizenship, until September 4, 1916. For many years the percentage of American seamen on American ships has been slightly under 50 per cent. The naturalization laws with respect to seamen permit the

[1] Johnson, *Ocean and Inland Water Transportation*, 262.

admission to citizenship of foreigners having previously made a declaration of their intention to become citizens, after three years of creditable service on an American merchant vessel. One-third of the seamen in the merchant marine of the United States who, in 1913, enjoyed the privileges of citizenship were naturalized Americans and were thus qualified for promotion to the position of watch officers. The salaries of officers on American ships are higher than the salaries of those on ships of other nations.

SHIP SUBSIDIES, 1845 TO 1872.

The fishing bounties were the natural forerunner of, and were used as an argument for, a ship-subsidy policy which had long been advocated, but was not adopted until 1845, when the introduction of steam threatened American shipping prestige. As long as vessels were built of wood and did not require machinery for their operation, the natural advantages enjoyed by American ship-builders were such that the industry was not in danger. When these conditions changed, statesmen pointed to the success of the government-aided lines which had grown up in Great Britain and France,[1] and when England, in 1839, granted a mail subsidy to the line which began operations to the United States in the following year as the Cunard Line, Congress was aroused to the importance of meeting a new species of competition. American merchantmen had previously maintained their prestige without subventions, but it was then recognized that encouragement would have to be given if steamships were to be built to meet modern competitive conditions. Even the speedy "clipper ships," introduced about 1845, were unable to compete with the new creation of the ship-builder's art. The bill which became a law on March 3, 1845, provided for ship subsidies through payments for mail carriage in excess of the value of the service rendered. The Postmaster General was authorized to contract with American owners of American vessels, preferably steamships, for the carriage both of foreign and of domestic mail. Rates of pay were stated in terms of the weight and classification of the pieces of mail carried, and in each case the inland postage was added to the compensation. Upon the payment of a fair amount the Government was given the right to take over the ships in which the mail was carried for use as war vessels.

The liberal rates offered did not bring about the establishment of any new lines, and Congress was obliged to go beyond the original policy of compensation. An appropriation of $25,000 was made in 1846 towards the establishment of a line of mail steamers to Bremen, and a contract was entered into the following year for service to Havre and Bremen via Cowes. This first mail-subsidy contract provided for the payment of $100,000 annually for each ship making the trip from

[1] *Debates of Congress*, XV, 563.

New York to Bremen and return once every two months. For the Havre service the subsidy was $75,000 per annum. Four first-class steamships were to be built within a year, pursuant to these contracts, and the line was to operate its ships "with greater speed to the distance than is performed by the Cunard Line between Boston and Liverpool and back." These arrangements resulted in the establishment of an irregular service to Bremen in 1847 and of the full service contemplated to both Bremen and Havre in 1851.

Meanwhile Congress extended the cash-subsidy policy to other lines. An act approved March 3, 1847, accepted proposals for mail carriage between New York and Liverpool, via the Collins Line, and between New York and New Orleans. The contract made with the Collins Line in 1847 provided that a New York-Liverpool service, started in 1850, was to be performed by five steamers receiving a total of $385,000 (it was $758,000 from 1852 to 1856) annually. There were also contracts for a New Orleans service, via Charleston, Savannah, and Havana, with additional service from Havana to Chagres, by five steamers receiving $290,000 annually; and for an Oregon service, connecting at Panama with the line from New York to Chagres, and with stops at San Diego, Monterey, and San Friscisco, by three steamers of the newly established Pacific Mail Steamship Company, receiving $199,000 annually. A separate Charleston-Havana service was later established pursuant to the same act, involving a single steamer which made stops at Savannah and Key West, and received $50,000 annually. Although the Postmaster General received proposals for the establishment of services to other countries, they were not accepted. The authorized subsidies were increased in some cases, however, and additional service required of the lines already established.

A combination of adverse circumstances brought a sudden end to the subsidy system. Ship-owners and ship-builders in the United States were unable to compete successfully with the British in the construction and operation of iron steamships. Despite indefatigable efforts, Americans soon found that economic conditions, which had formerly favored them, now aided British shipping. Coal and iron were indispensable, even in the operation of wooden steamships, of which the machinery was a vital part. In the cost of engines, as well as in the supply of labor, England had the advantage. Other economic factors limited American success in the keen competition of the seas. Foreign markets were more of a necessity to England than to the United States. Moreover, "England's need of ocean mail service and her ability to pay subsidies to maintain English ships were greater than the need and ability of the United States."[1]

Certain political considerations also contributed to the success of the British and the failure of the American subsidy policy. The British

[1]Meeker, *History of Shipping Subsidies*, 153.

colonial possessions necessitated the maintenance, under the British flag, of fast and numerous steamship lines, not only across the North Atlantic, where Americans sought to gain a foothold, but in every other ocean. The owners of American sailing-vessels were opposed to the preferential treatment accorded steamships, and this was not without its influence politically. Moreover, the Congressional debates preceding the withdrawal of the subsidies gave evidences of the growing conflict between the North and the South, the agricultural interests of the South being opposed to the extension of Federal aid to the commercial interests of the North. Accidents contributed to the downfall of ship subsidies. The loss at sea within two years (1854–56) of two high-class Collins steamers was a greater shock than the line could bear. Its traffic fell off and it was unable to maintain its schedules or to fulfill its contract with the Government. Although the Collins vessels were more luxurious and faster than the Cunard ships, the conditions as to speed and length of time in port interfered with their handling of freight cargoes. The failure of the Collins Line had much to do with the termination of subsidies.

The Senate Committee on the Post Office and Post Roads proposed the payment to American vessels of the sea and inland postage, and no more, for ocean mail transportation, arguing that this would be a sufficient inducement for the maintenance of an adequate European service. Notwithstanding the danger to the American merchant marine involved in the procedure, which was pointed out by Senator William H. Seward and others, the subsidies were withdrawn, and the payment to steamers of the ocean and inland postage substituted, in the "mail-steamer bill" of June 14, 1858. It was provided, however, that American ships were to be preferred, in selecting means of mail transportation, although the rates paid to them were to be higher, inasmuch as foreign ships were to receive only the sea postage.

The subsidies which had involved payments of approximately $14,000,000,[1] were not without beneficial results. They had assisted the merchant marine during the early years of a trying period; they had caused the construction of several modern steamships, and had brought about the establishment of important lines. That they did not achieve more is partly due to the lack of continuity in policy. Unfortunately, their withdrawal came at the time they were most needed, at the beginning of the great decline in the American mercantile marine.

[1]Dr. Meeker's figures, p. 156, reduced to tabular form, make the following showing:

Line.	Period of operation.	Approximate subsidy.	Line.	Period of operation.	Approximate subsidy.
Bremen........	1847–57	$2,000,000	Panama........	1848–58	$2,900,000
Havre........	1852–57	750,000	Pacific Mail....	1848–58	3,375,000
Collins........	1850–58	4,500,000	Havana........	1848–58	500,000

A temporary and half-hearted subsidy revival, instituted in 1865, did not accomplish much. One steamship line operated a monthly service from 1865 to 1876 between Philadelphia and Rio de Janeiro, receiving annually from the United States $150,000 and from Brazil $100,000; the Pacific Mail Line maintained a monthly service to Japan and China, receiving $500,000 annually; while for service to the Sandwich Islands $75,000 was paid annually. An additional monthly China and Japan service, carrying a $500,000 subsidy, was authorized in 1872, but canceled two years later, when it was shown that a large sum of money had been spent to secure the passage of the bill. When the ten-year term of the other Oriental contract expired, it was impossible to overcome the opposition to its renewal that had developed because of the corruption alleged to have been attendant upon the passage of the act of 1872. The Hawaiian service was given up in 1873.

Many other subsidy proposals were made but failed of passage, and those which were accepted did not accomplish the beneficial results expected of them. The United States did not capture Brazilian trade from Great Britain, nor did commerce with China and Japan appear to have been affected by the Oriental subventions. The temper of Congress is illustrated by the reception given the proposal of the ship-builder, John Roach, when, in 1879, he attempted to secure a subsidy for a new Brazilian line. Senator Wadleigh, of New Hampshire, argued that mail subsidies have a tendency to destroy home competitors, that the public was opposed to them because they were always given only to rich and powerful men, that they were an encouragement to bribery, that they had not in the past increased trade, and finally, that the specific Brazilian subsidy sought was unnecessary to enable the line to operate profitably.[1] "What is a subsidy?" he asked. "It is taking from the public treasury an amount of money wrung by taxation from the people for public purposes, and giving it to an individual upon the assumption that his business will benefit in some way the public, if it is successful."

THE OCEAN MAIL PAYMENT LAW OF 1891.

Following a prolonged agitation, a mail payment law, which was the first one of a general nature to be adopted by the United States, was secured in 1891. This law, which is still in operation, unlike its predecessors, does not call for the establishment of specific lines, but provides that the Postmaster General may make contracts, running from five to ten years, for the transportation of the mails to foreign countries upon steamers registered under the laws of the United States, officered by American citizens, and manned by crews at least half of whom, after the first five years of the contract, must likewise be Americans. The

[1] *Cong. Record*, 45 Cong., 3 sess., 1646.

classification adopted and remuneration authorized are specified in table 82..

The compensation varies according to a classification based on the speed and tonnage of the steamer employed, and the Postmaster General specifies the number of voyages required annually and the class of vessel to be used, except that mail to Great Britain must be handled in steamships of the first class. Vessels of the first three classes (2,500 tons or over), built after the passage of the act, are to "be constructed with particular reference to prompt and economic conversion into auxiliary naval cruisers, and according to plans and specifications to be agreed upon by and between the owners and the Secretary of the Navy." All vessels previously built, in order to qualify for mail contracts, must be approved by the Secretary of the Navy as suitable for the services in which they are to be employed. All of these steamers may be taken and used by the United States as transports or cruisers upon the payment of fair compensation.

TABLE 82.—*Classification of vessels and compensation allowed by mail payment act of 1891.*[1]

Class.	Minimum gross register.	Material used in construction.	Speed.	Maximum compensation.
	tons.		*knots.*	
First......	8,000	Iron or steel..	20	\$4 per mile, shortest practicable route for outward voyage.
Second....	5,000	.....do.......	16	\$2 per mile, shortest practicable route for outward voyage.
Third.....	2,500	.....do.......	14	\$1 per mile, shortest practicable route for outward voyage.
Fourth....	1,500	Iron, steel, or wood.	12	\$0.66⅔ per mile for actual number of miles required by the Post Office Dept. to be traveled on each outward-bound voyage.

The law attempts to provide for the training of American boys for the merchant marine by requiring that vessels employed in the foreign mail service shall "take, as cadets or apprentices, one American-born boy under 21 years of age for each 1,000 tons gross register and one for each majority fraction thereof, who shall be educated in the duties of seamanship, rank as petty officers, and receive such pay for their services as may be reasonable."

The results of this law were disappointing. While proposals were called for covering more than 50 ocean mail routes, only 11 contracts were entered into, providing for service to Venezuela (two lines), Panama (two lines), Japan and China, England, France and Belgium, the Argentine Republic, Brazil, Cuba, and Mexico. In order to provide ships necessary to make the service measure up to the terms of the contracts as to speed and frequency, the Postmaster General stated in 1892 that an expenditure of \$14,000,000 would have to be made by the contractors.

[1] Meeker, *History of Shipping Subsidies*, 166.

A special act, in 1892, admitted to American registry two new British-built vessels for the American Line, in order to permit them to receive trans-atlantic mail subsidies, and required the construction of two similar ships in American yards. The result was the construction of the *St. Louis* and *St. Paul*, not only the largest and most modern merchant ships built up to that time in this country, but then the best appointed and fastest afloat.

The ocean mail act of 1891, however, failed to accomplish important results in the way of encouraging shipping or ship-building, largely because the compensation offered was not proportionate to the service demanded. By 1893, three of the eleven routes originally established had been discontinued, and up to 1898 no lines had contracted to perform services on the Pacific.

Immediately following the Spanish-American war, there was a con-erted effort to secure an extension of the law, and in anticipation of he probable passage of a subsidy bill in 1899, 18 large steamships were onstructed. The law, however, failed of passage, and the futility of he effort to secure increased mail subventions was generally recog-ized. The Merchant Marine Commission of 1904 recommended both eneral bounties to all shipping and the subsidizing of steamers over n specified routes, in addition to those established under the act of 391. Rates of compensation high enough to attract capital to the rious enterprises were proposed, but Congress refused to act.

The payments for mail services have done but little as a stimulus the merchant marine. The number of routes operated decreased until, the close of the fiscal year 1913, there were only six.[1] The excess cost the contract service over what would have been paid in the ordinary urse was only $157,818.28.

The provisions of the Panama Canal act, which amended the mail-ntract law of 1891 to the extent of permitting foreign-built ships, sequently Americanized, if in their construction and operation the visions of the law of 1891 are complied with, to receive contract es for carrying the mails, had not been availed of up to November 4.

THE NAVY AND AMERICAN SHIP-BUILDING.

he American Navy has had a far-reaching influence on shipping rests through the protection it has afforded the merchant marine, h in time of war and of peace. The construction of modern men-of- has, moreover, afforded opportunity for the development of a able body of naval architects and ship-builders, and for the con-ction and maintenance of shipyards where both public and private els of the most advanced type may be built.

---

st class: New York to Southampton, England; second class: San Francisco to Sydney, alia; third class: New York to Vera Cruz, Mexico, and New York to Puerto Cabello, uela; fourth class: New York to Maracaibo, Venezuela, and Boston and Philadelphia to Antonio, Jamaica.

Early but reluctant and sporadic attention was given to the development of the Navy to protect the important merchant marine. The depredations of the Barbary pirates first demanded the reestablishment of a navy which had been disbanded, because the Confederation had no financial means for its support. Complications which arose with France hastened naval preparations, and in 1798 American warships were authorized to attack French cruisers. Together with privateers, the Navy carried on a successful war which was scarcely terminated, by a treaty negotiated in 1800, when the trouble with the corsairs broke out anew. A reenforced fleet humbled the pirates and brought about the peace of 1805, which freed American commerce for some time from the predatory attacks in the Mediterranean.

A more serious interference with commerce was that occasioned by the policy of Great Britain during the Napoleonic wars. Beginning in 1804, American merchantmen were searched and in many cases captured, seamen were impressed, and American ports unofficially blockaded. When the Navy proved ineffective in protecting the merchant marine, temporary embargo was placed upon shipping that compelled all American vessels to remain in port. The embargo authorized in 1807 was designed to operate so unfavorably against England that a satisfactory commercial treaty might be negotiated. It proved to be a complete failure, and in 1809 was supplanted by a non-intercourse act, prohibiting the vessels of France and England from entering American ports. During the war of 1812 the embargo was again adopted. Combined with the predatory tactics of France and the seizure of war prizes by England, it operated to drive the American merchant marine from the seas. After Great Britain had succeeded in bottling up the inadequate American Navy, speedy privateers were almost the only craft which sailed the seas, flying the American flag. Following the peace of 1814, a final and successful expedition to Algiers was carried out.

During the early years of American history no consistent naval policy was followed. When shipping was endangered by the hostile action of foreign powers, Congress responded to public demands by creating a naval force to cope with the situation. Such a method of procedure, however, always involved considerable losses before effective protection, if any, could be afforded. The general practice of the Government, of building its ships in its own yards, did not enable it to contribute directly to the encouragement of ship-building in any material way. During the War of 1812, however, contracts for naval vessels were placed with private yards and craft constructed under private auspices were sometimes purchased. Indirectly, moreover, Government naval construction contributed to the development of the ship-building industry, through the purchase of large quantities of materials, and the demand for ships' supplies and equipment.

Until the Mexican War, the country enjoyed peace. The Navy was employed in the suppression of slave-trading and piracy and in making voyages of exploration, whereby its assistance to shipping interests was continued. The Mexican conflict involved the merchant marine in very little danger and such naval action as was called for was principally in connection with joint operations with the army. The Perry expedition to the Orient, 1852–55, resulted in the opening of the ports of Japan, and illustrated the possibilities of utlizing the navy as an emissary of peaceful commercial development.

The losses suffered during the War of 1812 appear to have had a salutary effect, for a constructive plan for the gradual increase of the Navy, adopted in 1816, with the approval of both political parties, was consistently pursued. A greater recourse to private shipyards was necessitated by the adoption of steam-vessels for naval purposes. Robert Fulton designed the first of these, which was placed in service in 1815. The United States was slow, however, to develop a strong steam navy. It was necessary to resort more to private contractors following the introduction of iron warships, the first of which, the *Michigan*, was launched on the Great Lakes in 1844. Thereafter the construction of iron steamships for war service, many of which were of an experimental nature, continued slowly. Opportunities lost in the Mexican War, "simply for lack of motive power more reliable than the winds, served as excellent object lessons to direct naval and public attention to the necessity of having a fleet of steam war-vessels,"[1] and contributed to the adoption and extension of the mail-subsidy policy. The subsidized vessels were constructed under naval supervision and were subject to purchase for war purposes. In 1860 the steam navy consisted of 34 vessels. The impetus given by naval demands to construction during these years contributed directly to the great prosperity enjoyed by the shipyards. "Some of the most eminent of the American ship-builders were members of the naval construction corps,"[2] and a direct effort was made "to invite a healthful rivalry between naval constructors and civilian ship-builders by committing the building of some of the ships entirely to private enterprise." In such cases, navy engineers were detailed to superintend the work of construction. The machinery, however, was almost always manufactured outside of the Government yards, and the heavy demand for marine engines resulted in the establishment of a number of private plants.

During the Civil War ship-building was given a temporary stimulus by the necessity which the Government was under of obtaining ships to maintain the blockade of southern ports, cope with privateers, carry on naval warfare, and cooperate in army maneuvers. Of the entire work of building vessels and engines for the Navy during the war, 84.5 per cent was done in private yards. The Secretary of the Navy,

---

[1]Bennett, *The Steam Navy of the United States*, I, 102. [2]*Ibid.*, 142.

in his report for 1864, credited "the exigencies of the times and the necessities of war" with having "stimulated the inventive faculties of our countrymen to vast improvements in vessels, in engines," etc. The superiority of iron ships was clearly demonstrated during the war.

While the Civil War stimulated the growth of the ship-building industry and resulted in an improved and modernized equipment of shipyards, peace brought a disastrous decline. For twenty years the American Navy was neglected, and the shipyards failed to receive even the moderate impetus afforded by naval construction during the years prior to the war, under the influence of which they had been built up.

When the navy had fallen to a pitifully low ebb, and "repairs were no longer possible, for space for more patches was lacking upon almost every ship of ours then afloat,"[1] a naval policy was adopted which has aided the development of the ship-building industry. The first provision for the new navy was made in 1882, when the superiority of steel over iron was recognized. The delay was thus productive of some benefit, in that the construction of iron ships was in the main avoided. Progress was at first slow and considerable experimentation had to be undertaken. Almost all of the construction was done under private auspices. Shipyards on both coasts profited by the demand for a strong navy, but by far the greatest tonnage and the majority of the most important ships came from the yard of William Cramp and Sons, of Philadelphia, although the Union Iron Works, of San Francisco, and the Newport News Steamboat and Dry Dock Company were also awarded important contracts. The upbuilding of the Navy during this period is credited with having virtually started the steel ship-building industry of the country. Dr. Crowell presents an able summary of the effects of the national naval policy upon ship-building when he says:[2]

> "The policy of the Government in building up a navy has created a condition favorable to the increase of commercial tonnage, rather than acted as the cause of this increase. Building of warships created plants prepared to turn out merchant ships. Between that and the actual building of a merchant marine lies a not very deep gulf, which progress in the iron and steel industries of the United States has gradually been filling up."

An entirely new era in naval history, ushered in by the Spanish-American War, had an immediately favorable effect upon the ship-building industry.

In 1898 Congress appropriated $50,000,000 for national defense, and within a few months 102 vessels had been purchased, most of which had to be replaced by construction in American shipyards.

---

[1] Bennett, *The Steam Navy of the United States*, II, 772.

[2] "Shipping Industry of the United States; its Relation to the Foreign Trade," in *Monthly Summary of Commerce and Finance, Dec. 1900*, p. 1391.

The building of battleships and other war craft received so great a stimulus that, beginning in 1901, the tonnage of Government vessels far exceeded that of merchant vessels building at the seaboard. During several years, since 1901, the Government tonnage has been more than half the total construction; lake and seaboard combined. In 1912 the navy, as augmented by this construction work, consisted of an actual fighting force of 166 vessels, including 33 battleships. Practically all of the new vessels have been built at private shipyards, "principally because these industries should be encouraged, and the Government can thus profit by their experience and resources; and also because ordinarily the work is done more economically than at navy yards."[1] Not only in construction, but in the making of repairs as well, have private shipyards profited by the liberal appropriations of recent years.

SUMMARY.

The history of American shipping policy presents great variations in the attitude of the Federal Government towards the merchant marine. In the early days of the Republic, when shipping interests were of great importance, an ultra-protective policy was adopted which was relaxed only after American shipowners enjoyed the greatest carrying trade in the world, and when American ship-builders were without a peer anywhere. It was then that the statesmen of the Republic introduced a liberal policy of reciprocal treatment with respect to tariff and tonnage duties, which has since been adopted throughout the world. The opening of American ports to foreign vessels on a basis of equality did not undermine the merchant marine; nor did any other governmental policy. The decline began only when economic advantages in ship-building were acquired by Great Britain, due to the change of materials employed in construction. A more favorable British policy provided an encouragement which, temporarily at least, appeared to give to British shipping interests a large part of the carrying trade formerly enjoyed by Americans. But no governmental policy could have stayed the forces which were at work to bring about the downfall of American shipping.

The Civil War dealt the merchant marine a severe blow, and Congress has been criticized for its failure to meet the crisis by the adoption of remedial legislation. The tremendous expansion of the United States, which involved the opening up of the West by transcontinental railroads and the development of manufactures, attracted American interests from the seas and concentrated them upon home problems. There was no surplus population seeking employment elsewhere than at home, but on the contrary there was a demand for more labor at home, which resulted in a tremendous influx of immigration. Manu-

[1] *Report of the U. S. Secretary of the Navy, 1909*, p. 20.

factures required no foreign market, and only in recent years has an interest therein been awakened. There was thus in this country a general apathy toward foreign commerce and the carrying trade not shared by nations like England, which had colonies all over the world with which a constant, active connection had to be maintained, nor by other nations with manufacturing interests seeking an outlet abroad. So it is not surprising that Congress did not act, that it never adopted a successful shipping policy, that it failed to stay the decline in the merchant marine which followed the Civil War.

The times have changed since 1890. The one-time "infant" industries of the United States have risen to a position where they can supply the home market and in addition compete for markets abroad. Foreign trade can be carried on more successfully when served by an ample tonnage of vessels operated under the national flag from the principal American ports to all the commercially important countries. The ships of foreign nations, especially the vessels which are operated in regular lines over established routes, are operated primarily for the convenience of home shippers, whose interests the vessel-owners prefer to develop. American exporters need more lines of American ships for the transportation of their commodities.

The "free ship" laws of 1912 and 1914 are an indication that the old apathy towards shipping interests is giving way. It was in the Panama Canal act that this concession to shipping interests was first made, and the Panama Canal itself is serving to reawaken a public interest in shipping questions generally.

The policy of protection for American shipping and ship-building adopted at the very outset—the reservation of the coastwise trade to American bottoms—still remains and is likely to be retained. It is mainly responsible for the American merchant marine of to-day and, together with the naval policy of the United States, for the American ship-building industry as it now exists. The Panama Canal, through the extension and connection of the American coast-line, will increase ship-building. There are, moreover, indications in the growth of the steel industry and lowered costs of production that the United States may eventually be able to compete with foreign builders in the construction of steel ships.

All of these factors—the extension of national boundaries, the demand for foreign markets, the disadvantage to commerce of depending upon the merchant marine of business rivals, the opening of the Panama Canal, and the growing advantages enjoyed by American ship-builders, promise to increase the maritime prominence of the United States.

CHAPTER XL.

IMPROVEMENT OF RIVERS AND HARBORS AND REGULATION OF WATERWAYS.

The first period of river and harbor improvement, 1789–1823, 319. Gallatin's plan, 1808, 320. River and harbor legislation from 1823 to the Civil War, 321. Objections of President Jackson to Federal aid for internal improvements, 1830, 321. Causes of opposition to Federal aid and to internal improvements from 1830 to 1860, 322. From the Civil War to 1900, 323. Controversies over river and harbor legislation, 324. Waterway policy from 1900 to 1912, 325. The National Rivers and Harbors Congress, 326. Investigations and reports by the Inland Waterways Commission and the National Waterways Commission, 1907–1912, 326. Betterment of methods and agencies of making improvements, 328. Adoption by Congress of the "continuing contract" system, 1890, 329. Measures for prevention of floods, 330. Development of water-power by Federal Government, 331. Federal regulation of waterways, 331. Power over carriers by water vested in the Interstate Commerce Commission by the act of 1887, 332. Provisions of the Panama Canal act of 1912 regarding carriers by water, 333.

Few phases of governmental policy have given rise to so many questions of constitutionality and political expediency as has the improvement by the Federal Government of rivers and harbors. "Internal improvements" probably rank second only to the tariff among the economic questions to which public attention was directed during the first century of the national life of the United States.

THE FIRST PERIOD OF RIVER AND HARBOR IMPROVEMENTS, 1789–1823.

The first period of the improvement of harbors and inland waterways extended from 1789 to 1823, during which time the works were carried on largely by the State governments. At the outset the States, in conformity with colonial practice, took entire charge of such works of improvement as were necessary, and there was considerable hesitancy about delegating these functions to the Federal Government. The first evidence of a view that the control over interstate and foreign commerce given to the National Government by the Constitution entailed financial responsibility for the improvement and maintenance of water facilities is to be seen in the act passed in 1789, providing for the support, maintenance, and repair for one year of light-houses, beacons, buoys, and public piers by the United States. Provision for the continuance of this assistance was made conditional upon the transference of title to the facilities in question to the United States. Although the States did not immediately cede to the National Government the eight light-houses then in existence, Congressional appropriations continued to be made for their maintenance, and subsequent legislation included the "stakeage of channels on the sea coast" among the facilities for which the Federal Government undertook to assume responsibility. Thereafter appropriations were sometimes made for

the construction of aids to navigation at dangerous places along the coast. The first Government-built light-house was erected under an authorization by Congress in 1789, and in 1802 an appropriation was made for the repair and erection of public piers on a site to be owned by the United States Government, in the Delaware River.[1] These piers had previously been erected at various points in the river for the protection of vessels navigating the river in stormy weather.

Though the direct activities of the Federal Government in the work of improving rivers and harbors were at first confined to projects involving such facilities as light-houses and piers, over which the rights of ownership could be exercised, yet means were employed whereby the National Government could indirectly lend assistance in the prosecution of works undertaken by the individual States. This consisted in the enactment of laws permitting State governments to levy tonnage taxes, a power which, according to the Constitution, no State shall exercise except with the consent of Congress. Partly for the maintenance of the facilities which had been taken over by the Federal Government, the States had formerly collected tonnage taxes, and were permitted to continue doing so, the funds raised being devoted to the improvement and maintenance of rivers and harbors. State plans for improvement were submitted to Congress, and in 34 instances authorizations were given to levy tonnage taxes on shipping.

As the conception of a more centralized National Government gained strength, the inhabitants of the country west of the Allegheny Mountains insisted that the tonnage taxes which the seaboard States were allowed to levy for the establishment of transportation facilities should be supplemented by national assistance in the construction of turnpikes and canals connecting the seaboard with the West. An appropriation of $30,000 for the Cumberland Road was secured in 1806, and two years later Albert Gallatin, Secretary of the Treasury, drew up the first scheme for a comprehensive system of internal improvements to be constructed by the National Government. Undertakings of this nature had been favored by such influential statesmen as Washington, Hamilton, and Jefferson, who prepared the way for the new conception of Federal responsibility, and Gallatin's plan was looked upon generally with favor, but unfortunately the complications which led eventually to the War of 1812 arose to prevent the taking of any action on his scheme.

After the close of the war the agitation for internal improvements was renewed, but the policy of National improvement of the transportation system of the country was not adopted without opposition. President Madison, in 1817, vetoed the bill appropriating the bonus received for the charter of the Second Bank of the United States to the construction of roads and canals, because he did not believe that

---

[1] *Laws of the U. S. Relating to the Improvement of Rivers and Harbors* (Senate Misc. Doc. No. 91, 49 Cong., 2 sess., p. 8).

the Federal Government could constitutionally engage in works of internal improvements within the States. Although President Monroe shared this view, towards the close of his administration he so far overcame his constitutional scruples as to assert the right of Congress to raise money and to appropriate it at their discretion, "restricted only by their duty to appropriate it to purposes of common defense and of general, not local, national, not state, benefit."

RIVER AND HARBOR LEGISLATION FROM 1823 TO THE CIVIL WAR.

On March 3, 1823, Congress passed the first river and habor act.[1] In this act the first appropriation for an improvement in the nature of "clearing harbors" was made, and the following year a beginning of river improvements was authorized, when $75,000 was voted for the removal of various sand-bars, as well as "planters, sawyers or snags" from the Mississippi River. In 1824, moreover, a bill was passed, allowing $30,000 for the making of surveys, plans, and estimates covering road and canal routes deemed by the President to be of national importance. Officers of the Army Corps of Engineers, which had been established in 1802, were to be employed in this work. In the same year (1824) the first Federal land grants were made in aid of canals, and the following year the first Federal subscriptions were made to canal companies.

The United States Government had, by 1825, fairly entered upon the first period of real activity in the making of waterway improvements. The men in Congress who contributed most to the success of this movement were Calhoun, Clay, and especially John Quincy Adams, who became President in 1825. During his administration total appropriations of $1,294,266.23 were made for rivers and harbors. Clay was the most zealous of all the advocates of Federal action, the essential features of his "American System" being a protective tariff and extensive internal improvements—policies of equal importance in his scheme for the advancement of the economic welfare of the nation.

Calhoun soon became a party to the growing opposition to the system of national improvements, concluding that there was no constitutional authority for Federal prosecution of such works, and this was the view held by President Jackson, who in 1830, by his veto of a bill authorizing a subscription to stock in the Maysville and Lexington turnpike road in Kentucky, put an end for the time being to the direct appropriation of funds for internal improvements. Jackson objected to the bill on the ground that its character was local, and that it was, therefore, unconstitutional; and, even for the prosecution of national works of improvement, he regarded a constitutional amendment necessary. Except as to roads and canals, he was unable to enforce

[1]The appropriation contained in the act of May 7, 1822, for the construction of three piers near the mouth of Delaware Bay to serve as sea-walls, has sometimes been looked upon as a "harbor improvement" act in the modern sense. It really belongs, however, to the earlier period, providing as it did that the sites for the proposed improvements should be ceded to the United States.

his views upon Congress, which adopted the expedient of enacting legislation for river and harbor improvements as riders to appropriation bills. Sometimes the annual allowances made in this way were relatively large, ranging during President Jackson's administration from $300,000 to $1,000,000. President Van Buren was more thoroughly a strict constructionist than his predecessor was, and his constitutional views, together with more potent influences which are now to be considered, brought to a sudden halt the appropriation of liberal sums for waterway improvements, not, however, until after Congress, in 1838, had voted a sum of $1,512,194.53, which was the largest appropriation made for rivers and harbors until 1867, except in the year 1853.

The main causes of the reversal in policy were the following:[1]

The distribution in 1836 of the surplus which the National Government had acquired from the tariff duties and more especially from the sale of western lands resulted in a reduction of the Treasury surplus to a point where it was no longer practicable for the Federal Government to make internal improvements. The results of distribution were, moreover, inimical to the prosecution of such works by any public agency, for "wildcat" banking schemes, together with widespread financial disaster in 1837, attached an odium to internal improvements which were the real object of distribution. President Tyler's veto, in 1842, of the tariff bill which provided for distributing among the States any surplus that might result from its operation, for the purpose, among others, of carrying on internal improvements, put an end to the agitation for the distribution of the Federal revenues.

The operation of the "tariff of abominations" (1828), which Clay had linked with his plans for Federal improvements to form the "American System," was so unpopular as to bring the whole "system" temporarily into disrepute.

The introduction of the railroad (in 1830), and the demonstration during the succeeding decade of its practicability as a means of transportation, lessened the enthusiasm for the construction of roads and canals and the improvement of rivers, and constituted the strongest reason for the abandonment of such projects by the Federal Government.

The improvement of rivers and harbors became a party issue. The "strict constructionist" Democratic party was in the ascendancy through most of the subsequent thirty years.

Finally, war expenses incurred in the struggle with Mexico and in the Civil War put a quietus on projects involving waterway improvements. A river and harbor bill did, however, get as far as President Polk, during the Mexican War, only to be vetoed. Similar legislation was also vetoed by Presidents Tyler and Pierce.

[1]Johnson, "River and Harbor Bills," in *Annals of American Academy of Political and Social Science*, 1892, II, 788.

During the period of Federal inactivity, extending roughly from 1839 to 1866, such river and harbor appropriations as were made were accomplished mainly by indirect methods, a favorite device being to incorporate them in appropriation bills under the heading "fortifications, etc." Federal aid continued, however, to be given to some extent to such projects through the grant of public lands to the States, a popular method during the years when internal improvements were opposed as direct Federal undertakings. As late as 1868 a grant of land was made to the State of Minnesota to aid in the improvement of the navigation of the Mississippi River.

FROM THE CIVIL WAR TO 1900.

The Civil War brought a great change in the conception of the functions to be performed by the Federal Government, and the revival of interest in national works of waterway improvement after the firm establishment of peace is not surprising. The first act making an appropriation was passed June 28, 1864, and carried $250,000 for harbor and $100,000 for river improvements. It was followed by a similar act, in 1866, making a larger appropriation and constituting the beginning of a series of annual bills carrying grants for the improvement of rivers and harbors. The acts of 1866 and 1867 were passed within the same fiscal year, and brought the total appropriations for the year 1867 up to $8,777,329.61, which was much in excess of any previous Congressional allowance for similar purposes. It was, however, in 1869, when an appropriation of $2,000,000 was made, that the policy was inaugurated which has since prevailed, of making regular grants at from one to three year intervals, for rivers and harbors. Except for the year 1877, the bills were annual until 1882, when the biennial plan was adopted. In 1910 the plan of making annual appropriations was again adopted.

The report of the Select Committee on Transportation Routes to the Seaboard, commonly known as the Windom Committee, which was submitted to the Senate in 1874, stated clearly the view then entertained by Congress with respect to the power of the Federal Government to appropriate funds for the improvement of waterways. In the summary of its conclusions and recommendations, the majority stated in its report:

> "The power 'to regulate commerce' includes the power to *aid* and *facilitate* it by the employment of such means as may be appropriate and plainly adapted to that end; and hence Congress may, in its discretion, improve, or create, channels of commerce on land, or by water."[1]

Appropriation bills for river and harbor projects became popular with Congressmen; but in his fifth annual message, that of December 1, 1873, President Grant condemned "appropriations for river and

[1]Senate Report, No. 307, 43 Cong., 1 sess., III, parts I and II. Excerpt quoted in *Preliminary Report of Inland Waterways Commission*, 583.

harbor improvement in those localities where the improvements are of but little benefit to general commerce. . . . "[1]

In 1876, in a special message, President Grant stated:

"If it was obligatory upon the Executive to expend all the money appropriated by Congress, I should return the river and harbor bill with my objections, notwithstanding the great inconvenience to the public interests resulting therefrom and the loss of expenditures from previous Congresses upon incompleted works. Without enumerating, many appropriations are made for works of purely private or local interest, in no sense national. I can not give my sanction to these, and will take care that during my term of office no public money shall be expended upon them."[2]

The insistence of President Grant upon the prosecution of only those works which were national in character was unavailing in the face of the legislative practice of the time. Each Congressman was eager for an appropriation for his own district or State. President Arthur was opposed to the practice of appropriations making grants for a multitude of scattered works, and vetoed the act of 1882, but the act was passed over his veto. At least a portion of the public agreed with the President, and many Congressmen who voted to pass the act of 1882 over the President's veto lost their seats, and thereafter, until 1896, the appropriations became biennial.

The character of the works authorized and the considerations which entered into the passage of the bills during a period when river and harbor legislation was passed with such readiness, are stated by Alexander Johnston, who wrote in 1883:

"In such a mass of appropriations it is impossible that there should not be very many objects well worth the care of the National Government; but, with every allowance, the amount of absolute plunder in the total must have been enormous. In debating one of these bills a member of Congress declared from personal knowledge that one 'river,' for which an appropriation had been inserted, could be fitted for commerce only by being paved or macadamized; and this instance was certainly not an isolated one . . . In fact, most of these appropriations are not for the public interest at all, but for the personal interests of the legislators, for the reelection of a Congressman often depends upon his success in 'bringing money into the district' through the river and harbor bill, or the erection of public buildings."[3]

Although facts such as these were well known, and river and harbor improvements were the subject of a widespread and acrimonious discussion, Congress continued to make appropriations which were large because of the great number of works authorized and undertaken. The biennial bill passed in 1896 carried over $70,000,000, which was more than any single river and harbor act had ever before appropriated. However, the growing effect of the criticism of such legislation is to be seen

[1] *Messages and Papers of the Presidents*, VII, 243. [2] *Ibid.*, 377.

[3] Lalor (ed.), *Cyclopedia of Political Science, Political Economy and of the Political History of the United States*, II, 572.

n the fact that from 1896 to 1905 bills were passed at three-year ntervals instead of biennially. As the chairman of the House Comnittee on Rivers and Harbors stated, public opinion was coming to xercise "a despotic force in this country," which was more than the ld system, or lack of system, in waterway improvements could stand.

WATERWAY POLICY FROM 1900 TO 1912.

About the beginning of the century a transition may be noted to a ore systematic policy regarding the prosecution of Federal works, the irpose being to place the improvement of rivers and harbors on a ore scientific basis. Writing in 1892, Prof. Emory R. Johnson pointed t the course which waterway improvements were to take during this riod, when he said:[1]

'The change demanded by the facts lies in the direction neither of no enditure nor of less expenditure, but in the direction of more expenditure i wiser manner, a manner in which the public money shall be more scienally expended on works fewer in number and more strictly national in racter."

ı number of reasons may be adduced to account for the ultimate :ess of the agitation for a reform in the methods of waterway rovements. Not only in the unmistakable opposition to waterway ects from certain quarters, but in the positive demand for them ı others, may be seen a reason for a change in methods. A demand ıttention came with peculiar force from important seaboard cities. increased draft of modern ocean-going vessels made it impossible hem to load to full capacity in many ports. In 1907, moreover, y crops and exceptional prosperity resulted in an abnormal rail c and a serious freight-car shortage, giving rise to the belief that railways had "broken down." Although a freight-car surplus r than the previous car shortage followed the panic of 1907, and ailways did not have a car shortage for some years thereafter, vents of 1907 were not without results, because they called attento the possibilities of improving the navigable streams of the ry, in order that they might serve as supplementary transportagencies for the relief of congestion. President Roosevelt, believing 'river regulation is rate regulation," advocated the development treams as highways to the fullest extent which is genuinely ıble" as a means to prevent excessive freight rates. This focusattention upon river navigation had the effect of inaugurating ies into the best methods of waterway improvement.

ıovement which started about 1907 and which influenced water-›olicy was that directed towards the conservation of natural ces. This movement at first related to forests alone, but when

r and Harbor Bills," in *Annals of American Academy of Political and Social Science*, 811.

public interests were seen to demand greater waterway utilization, with respect both to navigation and to power development, one of the questions which commanded attention was the relation between forest preservation and stream flow. Thus the waterways were linked with the forests to inaugurate a large conservation movement, which demanded a complete utilization of waterway resources for the public benefit.

Various agencies contributed to the concentration of public attention upon the waterway problem. In one class may be grouped the thirty or more congresses and associations organized in different localities in recent years for the purpose of securing Federal aid for projects of waterway improvement. In order to unite the efforts of such agencies, the National Rivers and Harbors Congress was organized in 1901 with a membership comprising individuals, corporations, commercial bodies, and waterway associations. While this Congress has not supplanted the smaller associations, for it advocates no particular project, but a definite policy whereby every waterway which its members consider worth improving will receive prompt and adequate attention, it has been able to secure greater public interest in the propositions for which it stands than could the associations organized to further particular objects. The slogan of the Waterways Congress since 1906 has been: a Federal appropriation each year of at least $50,000,000 for river and harbor improvements.

Two National commissions, appointed to make inquiries into the question, have also directed public attention to waterway policy. The first of these, the Inland Waterways Commission, appointed in 1907 by President Roosevelt, was designed to recommend legislation dealing in a comprehensive manner with the whole question. The Commission submitted, February 3, 1908, a preliminary report,[1] making the following recommendations: (1) That plans for improving navigability should take into consideration all uses to be derived from the control of waterways (flood control, land reclamation, water-power development, etc.); (2) that local cooperation should be secured in meeting the costs of improvement; (3) that the plans adopted should contemplate the correlation of rail and water facilities; (4) that harmonious and complementary relations between railways and waterways should be assured; (5) that statistical data should be gathered regarding inland water traffic; (6) that data should be compiled concerning the physical character of streams; (7) that due attention should be paid to the conservation of water resources; (8) that waterways should be improved at the rate required by public needs, to which end the Commission advocated (*a*) expert framing of a definite policy, (*b*) certainty of continuity, and (*c*) expert initiative in the choice of projects and in the order of their undertaking; (9) that a permanent national

[1] Senate Doc. No. 325, 60 Cong., 1 sess. XVII, p. 25.

waterways commission be established to bring into coordination the various Governmental agencies involved in waterway control and utilization, and to recommend to Congress plans for improvements, taking into consideration all the uses to which waterways are adaptable.

While the Inland Waterways Commission did not live to continue its investigations itself, its work was not unavailing. Out of its labors grew the call for the assemblage, in 1908, of the first White House conference of governors, and other eminent men, for the consideration of conservation, which temporarily became a national movement. The commission's work was also effective in another way. Although the efforts made in Congress to continue its existence were unsuccessful, yet in 1909, in the National Waterways Commission, a substitute was provided which, in a period of two and one-half years, made a scientific investigation of the whole waterway question, both at home and abroad, and submitted reports which embody the essential features of a scientific policy of improvement. The commission presented its conclusions upon such fundamental questions as the advisability of undertaking waterway improvements at all. Even in the face of diminishing river traffic, a continuation of river improvements was urged, because of the economy in transporting by water heavy freight moving long distances. It was pointed out that the minimum of power and equipment is required, and that, inasmuch as it is relatively easy to engage in water transportation, competition is encouraged and monopoly restricted. The commission undertook to show why promised advantages had not accrued to the public as a result of former works of improvement, it pointed out the evils which had been a part of the waterway policy of the past, and recommended a policy for the future. The chief evils cited were unfair railway competition, inadequate public control of the relations between railways and waterways, Governmental delays in prosecuting projected works, failure of business interests to make complete utilization of the facilities provided, and inadequate terminals. To meet these and other difficulties which had stood in the way of a more complete waterway utilization in the past, the commission recommended:

First, greater cooperation on the part of the railways with the waterways. The commission pointed out that unfair competition, such as the temporary reduction of rates for the purpose of driving river boats out of the business, must be stopped; and that real cooperation should be secured by requiring the establishment of through routes via rail and water lines, the quotation of joint rates, the issuance of through bills of lading, and the installation of physical connections between the two classes of transportation lines. As the best means to the accomplishment of these various ends it recommended, in addition to the passage of adequate legislation, that the Interstate Commerce Commission be given control over water carriers.

In the second place, public control—State or municipal—of water terminals. The commission believed that Federal appropriations, both for river and harbor improvements, should be conditioned upon the assurance that sufficient public terminals would be available at reasonable charges for use by all who desired to use the waterway.

In the third place, the broader problem of stream control and utilization for all purposes was given careful consideration. While adhering to the view that Federal waterway improvements should be undertaken with the primary purpose of improving the navigability of streams, the commission felt that "the time has already come, especially in the more thickly settled river valleys, when a stream must be considered with a view both to minimizing its harmful influences and to securing the maximum benefit from all its uses."[1]

BETTERMENT OF METHODS AND AGENCIES OF MAKING IMPROVEMENTS.

The National Waterways Commission's work gave direction to public sentiment and enabled it to bring pressure to bear upon Congress for action along definite lines. Before the commission's labors were begun, however, the Federal Government had commenced to deal more efficiently with waterway improvements. In 1902 the Board of Engineers for Rivers and Harbors was established. Previously reports were made to Congress upon a multitude of projects without a review of the work as a whole by a single board of engineers. The aggregate cost of the improvements recommended in 1902, including those under way and those not begun, would have been $400,000,000, and Congress was at a loss to know upon which of these undertakings to begin work. It was hoped that through the creation of a board of engineer officers greater uniformity might be secured in recommendations and reports concerning projects, and, moreover, that the advisability of the further prosecution of questionable existing projects might be investigated.[2]

While this was the first attempt to establish a single advisory board to deal with all of the works of improvement throughout the country, such a method of procedure had previously been adopted with respect to specific localities. Since early in 1879 the Mississippi River Commission has had charge of preparing plans for improving the navigability of the Mississippi River and preventing destructive floods. A Missouri River Commission existed from 1884 to 1902. A similar body, the California Débris Commission, was established in 1893 to adopt plans to improve the navigability of the Sacramento and San Joaquin River systems, which were to be restored "as near as practicable, and the necessities of commerce demand," to the condition existing before they were filled with débris as a result of hydraulic mining operations. Congress has often created special boards to report

[1] *Final Report of National Waterways Commission*, 27. Senate Report No. 469, 62 Cong., 2 sess.
[2] House Doc. No. 795, 57 Cong., 1 sess., IV, p. 3.

upon particular projects. Instances of this were the boards appointed in 1902, 1905, and 1910 to consider the feasibility of a ship waterway connecting the Great Lakes with the Mississippi River and the Gulf, and to report upon the problem of maintaining the level of the Great Lakes after the diversion of water from Lake Michigan through a waterway to the Mississippi River. There is a permanent International Waterways Commission that has control of the use of the waters of the Great Lakes for power and other purposes.

The National Waterways Commission found that Congress, with rare exceptions, was adhering to the policy of undertaking no project that had not received the approval of both the Board of Engineers for Rivers and Harbors and the Chief of Engineers. The commission stated, moreover, that the recommendations of the army engineers have been indorsed, even in the face of occasional strong local opposition. This was a great improvement over past practice.

Efforts have been made in recent years to increase the efficiency of the Engineer Corps of the Army. In 1902, Congress authorized the creation of an engineer post and school at the Washington Barracks, which affords very necessary training, in view of the fact that the small size of the corps necessitates the assumption of heavy responsibilities by young officers. In 1911, Congress provided for increasing by 60 officers the size of the corps, which for a number of years had remained stationary at 188.

In the river and harbor act of 1890 Congress adopted for the largest improvements the "continuing contract" system. The entire amount estimated to be needed for a given project is authorized at the time of the first appropriation; but only such funds as are necessary for current work are made immediately available. Thereafter, from year to year, in the sundry civil bill or the river and harbor bill such additional funds are voted as are needed. This plan insures the completion of approved works and tends to prevent extensive delays due to a lack of funds incident to the failure of Congress to pass river and harbor bills frequently enough to keep the work in continuous progress. This system has been followed for some appropriations contained in all river and harbor acts since 1890, with the exception of that passed in 1894. However, since the inauguration, in 1909, of annual appropriation bills, decreasing provision has been made for continuing contracts which, in 1913, were applied only to the Hudson and Ohio Rivers

In 1910 Congress fixed a time limit for the completion of some of the larger projects for which appropriations were made While such a stipulation is not absolutely binding, it has the advantage of committing Congress to a proposed work and of furnishing parties contemplating the use of a waterway with advance notice of the probable date of its availability. A further step was taken in the same direction in 1912, when the army engineers were instructed to report to Congress, with

reference to projects which they investigated and approved, the rate at which the work should be prosecuted.

When Congress began to introduce scientific methods into river and harbor appropriations, it found that the number of unfinished projects was so large as to make it well-nigh impossible to carry improvements to a speedy completion. In the act of 1907 a policy of completing old projects before undertaking new ones was followed to some extent. The readoption, beginning with 1910, after a lapse of 28 years, of the practice of making annual appropriation bills, made it easier to keep improvements abreast of current needs, and prevent losses and delays incident to the enforced idleness of men and equipment and the leaving of work in an unfinished state pending Congressional action. Appropriations were, moreover, relatively large during the five years ending with 1912. The average annual river and harbor expenditures for the five years, 1898–1902, were $17,206,461; for the five years, 1908–1912, $32,558,354.

Congress has recognized in a slight way the necessity of there being river ports and terminals as well as navigable channels. The river and harbor act of 1909 provided that the engineers' reports upon projects authorized by Congress to be investigated shall contain information as to the necessity for the establishment of terminal and transfer facilities. The act of 1912 authorized the Secretary of War to investigate and report on the water terminals and facilities contiguous to all waters under improvement by the United States. But the recommendation of the National Waterways Commission, that no further appropriations for rivers and harbors be made until assurance is given by local authorities that adequate terminal facilities will be available at reasonable charges, has not been followed.

Congress has given some attention to measures for the prevention of floods. Flood control, however, is not considered to be a part of the work of improving rivers for purposes of navigation. River and harbor legislation since 1902 has accordingly included appropriations for the Mississippi River levees, only when such levees were considered necessary for channel regulation. The United States has borne less than one-half of the expense of the construction of the Mississippi River levees, the remainder of the burden having been borne by the States along the lower course of the river. In 1912 Congress authorized a special board of army engineers to investigate and report upon the necessity and practicability of constructing dams to provide impounding reservoirs at the headwaters of the Allegheny, Monongahela, and Ohio Rivers. The opinion of engineers as to the practicability of preventing floods by the construction of dams near the headwaters of rivers is divided. Some dams have been constructed in the upper courses of the Mississippi River, but those dams were built, not to reduce floods, but to provide more dependable water-power at Minneapolis.

The interdependence, under some circumstances, of channel improvement and water-power development has been recognized by Congress. By the law of 1906, individuals or companies, after having obtained grants to construct a dam across a navigable stream, must submit plans to the Secretary of War and the Chief of Engineers and receive their approval, before construction is commenced; and in 1910 these officials were given authority to consider the relation of a proposed dam to a comprehensive plan for the improvement of the waterway concerned, with a view to the promotion, both of navigability and of water-power, and they were, moreover, given power to impose conditions upon the grantees looking to the improvement and development of navigation and to fix charges to pay for the restoration of the navigation conditions existing before the privilege was granted. Congress provided in 1910 for the levy of charges by the Chief of Engineers and the Secretary of War on persons who are granted the right to construct dams, when the grantees receive any direct benefit from the maintenance by the United States either of storage reservoirs, or of forested watersheds maintained at headwaters of navigable streams for the purpose of developing, improving, or preserving navigability.

Congress has enacted legislation looking to the development of water-power directly by the Federal Government. The army engineers were in 1909 authorized to take into consideration, when making preliminary surveys, the possibilities of water-power development, and to submit recommendations looking to that end when the cost of the improvements to navigation might thereby be diminished. The river and harbor act of 1912, moreover, authorized the Secretary of War, at his discretion, upon the recommendation of the Chief of Engineers, to equip dams at any time authorized for the improvement of navigation with such foundations, sluices, and other works as may be considered desirable "in order to make possible the economical future development of water-power."

Recent river and harbor acts have not only increased the scope of the reports to be made by the army engineers on projects submitted to them for investigation, in the respects which have been mentioned, but have also required that the plans and estimates shall contain a statement as to "such other subjects as may be properly connected with such project." The only limitation is that the improvements recommended must relate directly to navigation and be considered with reference to their bearing upon it.

FEDERAL REGULATION OF WATERWAYS.

Having power under the Constitution to regulate commerce among the States and with foreign nations, the Federal Government is the authority which regulates waterways that are or may be used in inter-

state commerce. The waterways at ocean, lake, and river ports are regulated both by the States and by the Federal Government. The United States Government constructs the channel to and past the ports, marks the channel, and establishes the pierhead lines. The administrative activities of the Federal Government at ports tend to increase with the development of commerce and with the increase in the size of harbors. Beginning with 1899, it has been the general practice of the Federal Government to establish pierhead lines and thus to define the boundary between the State and Federal jurisdiction at harbors and ports.

Pilotage and quarantine administration is shared jointly by the States and the Federal Government. The States have regulated pilotage since 1789 by permission of the Federal Government, but as regards quarantine the States, under their police power, have the right to maintain quarantine services for the protection of the public health. The Federal Government under its power to regulate commerce may also maintain quarantine administration, and the tendency is for the States to turn over to the Federal Government all matters of quarantine.

The Federal Government carefully regulates structures placed in or over navigable waterways. In 1866 the Secretary of War was authorized and directed by Congress to examine and pass upon plans for railroad bridges across the Mississippi River. In 1884 an act was passed providing for the elimination of certain obstructions to navigation in the Mississippi. By the river and harbor act of 1899, the control by the Federal Government of structures over navigable waterways was made so broad that no construction in or over a navigable waterway may be undertaken until the plans have been approved by the Chief of Engineers and the Secretary of War. The State of New York, for example, which is making radical improvements in the Erie Canal, was obliged to submit its plans for changing the canal to the Chief of Engineers of the U. S. Army and the Secretary of War for approval, because the Erie Canal, although lying wholly within the State of New York, is largely used in interstate commerce.

The interstate commerce act of 1887 gave the Interstate Commerce Commission limited power over carriers by water. The act provided that common carriers "engaged in the transportation of passengers or property wholly by railroad (or partly by railroad and partly by water when both are used under common control, management or arrangement for a continuous carriage or shipment), from one State or Territory of the United States or the District of Columbia, to any other State or Territory of the United States or the District of Columbia" shall be subject to the jurisdiction of the Commission. The provisions of the act of 1887 enabled the Interstate Commerce Commission to establish through routes and joint maximum rates by a joint rail and water line, but did not give the Commission any authority

over rates of carriers operating by an all-water route. Likewise, carriers engaged in traffic by a joint rail and water route must keep the accounts of their traffic in accordance with the requirements of the Interstate Commerce Commission as to uniform accounting. Carriers engaged solely in transportation by water do not have to make statistical reports to the Interstate Commerce Commission, but carriers such as those on the Great Lakes, which are engaged both in transportation by all-water routes and in the transportation of traffic that moves by joint rail and water routes, must report to the Interstate Commerce Commission statistics of all their traffic by water.

The Panama Canal act of August 24, 1912, gave the Interstate Commerce Commission authority "to establish physical connection between the lines of the rail carrier and the dock of the water carrier by directing the rail carrier to make suitable connection" where this is "reasonably practicable." By the same act the Commission is given power "to establish through routes and maximum joint rates between and over such rail and water lines," and "to establish maximum proportional rates by rail to and from the ports to which the traffic is brought, or from which it is taken by the water carrier, and to determine to what traffic and in connection with what vessels and upon what terms and conditions such rates shall apply."

This amendment of the Interstate Commerce Act was made for the purpose of insuring to shippers facilities for through shipment of traffic by joint rail and water lines, and thus to prevent the railroads from limiting the usefulness of waterways by refusing to enter into joint arrangements with carriers by water as regards services and rates.

Another provision of the Panama Canal act of 1912 makes it unlawful for any railroad company, after the first of July 1914, to own, lease, operate, or control any common carrier by water "operated through the Panama Canal or elsewhere, with which said railroad or other common carrier aforesaid does or may compete for traffic." The Interstate Commerce Commission is given jurisdiction to determine the questions of fact as to the competition or possible competition. If the Interstate Commerce Commission is of the opinion that any particular service by water that may be maintained or controlled by a railroad (provided it is not a service through the Panama Canal) is in the interest of the public and of advantage and convenience to commerce, the Commission may permit the continuance of such service, provided the railroad company controlling the carrier by water makes application for the continuance of the service, and provided, further, that the water carrier shall become subject to all the provisions of the interstate commerce act.

A large number of coastwise lines are directly or indirectly controlled by railroad companies, and most of the package freight lines on the Great Lakes have been owned by the trunk-line railroads. The

Interstate Commerce Commission was petitioned by numerous railroad companies for permission to continue the ownership and operation of steamship lines. The most important of these petitions was the one by the trunk-line railroads having steamship lines on the Great Lakes. In a decision rendered May 7, 1915, the Interstate Commerce Commission held that "none of the several existing specified services by water is being operated in the interest of the public or is of advantage to the convenience or commerce of the people," and that the railroads must dispose of their lines of vessels on the Great Lakes by the first of December 1915.

The provision of the Panama Canal act of 1912 which requires the complete separation of carriers by rail and carriers by water establishes a new principle in the regulation of the use of waterways. This action of Congress was based upon the theory that the competition of waterways with railways is practicable and desirable, and that waterways will be more largely used and be of greater benefit, if the railroads are not allowed to own vessels to be operated over waterways that parallel, or form routes that compete with, the lines of the railroad company owning the vessels.

CHAPTER XLI.

TARIFF PROVISIONS CONCERNING THE SHIPPING AND FOREIGN TRADE OF THE UNITED STATES.[1]

Three general periods of tariff provisions regarding shipping and foreign trade, 335. Early tariff provisions to aid Oriental trade, 336. Tariff provisions affording protection to shipping, 337. Tariff provisions regarding shipping reciprocity, 338. List of treaties establishing shipping reciprocity, 339. Trade reciprocity treaties with Canada, 340; with Hawaii, 341. Reciprocity agreements of the McKinley and Dingley acts, 342. Reciprocity treaty with Cuba, 344. List of reciprocity treaties and agreements, 345. Miscellaneous tariff provisions to promote trade, 346. The dual tariff policy of the Payne-Aldrich act of 1909, 347. Summary, 347. Tabular digest of provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building, 349.

Though the tariff laws of the United States,[2] in their relation to the foreign trade, have been altered on numerous occasions, three general periods are distinguishable. During the first, which extended from the beginning of national tariff legislation until 1818, the country's trade was largely international, and the tariff laws consequently aimed to promote the foreign trade. During the second, which, with certain interruptions, extended from the act of 1818 to the act of 1909, the foremost purpose was the development of home industries and the promotion of home markets. The tariff acts enacted during this period contained numerous provisions designed to assist the foreign trade, but these provisions were of minor importance. With the exception of limited periods in 1846 to 1861, and 1894 to 1897, it was the era of protection, and the protective-tariff policy, as then favored, was one that aimed to provide home markets for the industries which it fostered.

The third period began with the tariff act of 1909. It is too early to determine whether this period is to be one characterized by protection or free trade or by an intermediate policy. In either event it is a period during which the development of the foreign trade is a consideration of greater importance than it formerly was in the drafting of the country's tariff laws. The tariff act of 1909 protected American industries and domestic markets with high import duties, but embodied the principle of a maximum and minimum schedule with the avowed purpose of assisting the American exporter in the development of foreign markets. The act of 1913, which reflects a reaction toward freer trade, endeavors to promote the foreign trade by reducing import duties and negotiating trade agreements. So urgent has the need for foreign as well as domestic markets become to the manufacturing industries that both the protective and free-trade policies of recent years, although in different ways, endeavor to promote the for-

[1] This chapter was written by G. G. Huebner.

[2] For discussion of Philippine tariff acts see chap. xxviii.

eign trade. A protective-tariff administration showed its desire to promote international trade in 1911 by extending to Canada, the second largest foreign market for American exports, an offer for comprehensive trade reciprocity.

An examination of the sections relating directly to foreign commerce in the various tariff acts of the United States will show that such provisions may conveniently be divided into (1) those designed to promote the Oriental trade, (2) those concerning shipping protection, (3) those regarding shipping reciprocity, (4) those providing for trade reciprocity treaties and agreements, and (5) miscellaneous provisions.[1]

EARLY TARIFF PROVISIONS TO AID THE ORIENTAL TRADE.

Immediately after the Revolutionary War there began a period of brisk foreign commerce, in which American merchants sought to trade directly with markets formerly reached by way of Great Britain and Europe. In 1784 the direct trade with China commenced, and at about the same time American East Indiamen began their first voyages.[2] July 4, 1789, with the first law enacted by the National Government, began a series of tariff provisions which so stimulated this oriental trade as to make it an important factor throughout the early commercial life of America. This law, as stated in Chapter XXIII, imposed a duty on tea imported direct from India and China, in American vessels, ranging from 6 to 20 cents per pound; but on tea imported from Europe the duty ranged from 8 to 26 cents, and on tea brought in foreign vessels, from 15 to 45 cents per pound. Likewise, all other Oriental products imported in foreign vessels were obliged to pay a duty of 12.5 per cent ad valorem, or almost twice the rate levied on imports brought in American vessels. Even as late as 1830 provisions similar to these were reenacted in tariff laws.

Largely because of these tariff provisions, the oriental trade rapidly became an important factor in the commerce of Salem, Boston, New York, Providence, Philadelphia, and Baltimore. It assisted in the establishment of various manufacturing industries, such as silk spinning and finishing, and the production of morocco leather, and "laid the foundation of those great fortunes which constitute the origin of the wealth of so many of the older New England families."[3] The favorable tariffs were taken advantage of especially by the merchants of Massachusetts, who "brought back immense quantities of tea, spices, sugar, coffee, silks, nankeen and other cloths—all of them of great value in proportion to their bulk and therefore yielding heavy profits in the carrying trade; and whatever did not find a market at home was reshipped from New England ports and sold at Hamburg or northern Europe. It may be said that the marked commercial feature of the period was the development of this trade."[3]

[1]See table 85 at end of this chapter for tabulation of provisions intended to promote foreign commerce.

[2]See volume I, chap. xi.

[3]Soley, *Maritime Industries of America*, in Shaler, *The United States of America*, I, 525.

The intent of these laws was (1) to increase the trade with the East and (2) to confine it to American vessels; and both of these aims were successfully effected. The increase in trade was confined principally to the direct importation of oriental wares, for there was at that time little demand for American exports in Eastern markets. Moreover, neither the increase in trade nor the growth of the far-eastern carrying trade was due entirely to these provisions of the tariff laws. Other forces also tended to promote foreign commerce and the carrying trade of the United States during the years 1789 to the War of 1812, in the Orient as well as elsewhere.[1]

TARIFF PROVISIONS AFFORDING PROTECTION TO SHIPPING.

The second group of tariff provisions, which was an appreciable factor during the early growth of American foreign commerce, provided for protection to American shipping. Under the law of 1789 imports in American vessels received a discount of 10 per cent below the general tariff rates. In 1794, however, this was changed, so that imports in foreign vessels were obliged to pay an increase of 10 per cent. In this form the protection to shipping was maintained until 1815, when its "outer garments" were removed by the introduction of shipping reciprocity in the direct trade with foreign nations, and it was still further weakened in 1828, when the President was authorized to suspend it also in the indirect trade with all nations which would reciprocate. Thereafter, the 10 per cent discrimination against foreign vessels was repeatedly reenacted in practically all subsequent tariff laws of importance, and it appears even in the tariff act of 1913, but after 1828 the provision applied only to those foreign vessels which by law or treaty are not entitled to shipping reciprocity.

The act of 1913 endeavored to revert to the policy of shipping protection by providing "that a discount of 5 per cent on all duties imposed by this act shall be allowed on such goods, wares, and merchandise as shall be imported in vessels admitted to registration under the laws of the United States." It also provided, however, "that nothing in this subsection (J 7) shall be so construed as to abrogate or in any manner impair or affect the provisions of any treaty concluded between the United States and any foreign nation," and the discount provision of the act of 1913 has thus far been without effect.

In the early tariff laws, American shipping, as was set forth in Chapter XXX, was further protected by discriminatory tonnage duties. The law of 1804 levied a "light money" tax of 50 cents per ton on foreign vessels, and in 1812 this was increased to $1.50. The law of 1815, however, sounded the death knell of this form of shipping protection in the direct foreign trade. Though in exceptional instances discriminating tonnage duties were thereafter increased, reciprocity steadily gained ground. In 1817 tonnage duties were further increased

[1] See chap. xxiii.

in the case of nations barring American vessels, and occasionally exorbitant taxes were imposed upon vessels of particular nations, such as the duty of $18 against French vessels in 1820, but their intent was to enforce shipping reciprocity and not to discriminate in favor of American vessels. As in the case of discriminating tariffs on commodities, provision was made in 1828 for the removal of discriminating tonnage duties in all foreign trade, indirect as well as direct. Finally, in 1832, the President was given definite authority to reciprocate in the matter of tonnage duties.

The tonnage-tax law of 1884, as amended in 1886, also provided for reciprocal tonnage-tax exemption, and imposed a duty of 3 cents per ton, but not exceeding 15 cents annually, upon all vessels entering from foreign ports of North America, Central and South America, the West Indies, and the Bahamas, and of 6 cents per ton, but not exceeding 30 cents annually, upon vessels from the ports of other nations. It remained in force until August 1909, when the tariff act of that year reduced the tax on ships trading in nearby foreign waters to 2 cents, not to exceed 10 cents per net register ton per year, and repealed the provision under which vessels coming from a foreign port in which no tonnage taxes or corresponding charges were imposed on American vessels were exempted from tonnage taxes in all ports of the United States. In March 1910, however, the act of the preceding year was changed so that "vessels entering otherwise than by sea" from a country entitled to the 2 cents tonnage-tax rate are exempted from the payment of tonnage taxes in case such countries do not impose tonnage, light-house, or other equivalent dues upon American vessels.

The effect of protection to American shipping was decidedly stimulating. In 1789 the American merchant marine carried 17.5 per cent of the imports and 30 per cent of the exports; five years later these proportions were 90 and 88 per cent, respectively. The importance of the American merchant marine increased until the War of 1812, when all trade declined; but by 1820 it again carried 90 per cent of the imports and 80 per cent of the exports. Though the absolute tonnage of American vessels engaged in the foreign trade reached its climax in 1861, with a total of 2,496,894 tons, their relative position began to decline in the later thirties. In 1913 the absolute tonnage of the American merchant marine was 1,027,000, and it carried but 8.9 per cent of the country's foreign trade.

TARIFF PROVISIONS REGARDING SHIPPING RECIPROCITY.

As was noted above, the first step away from shipping protection was taken in 1815, when provision was made to remove it in the direct trade with foreign nations, and the second in 1828, when similar provision was made for the indirect trade. Although the effect of this liberal legislation was detrimental to American shipping, its intent was to promote both the shipping industry and foreign commerce. The

belief was prevalent that the American merchant marine was then so firmly intrenched that, if shipping reciprocity were established with foreign nations, it would destroy foreign shipping in the American trade. It was held that as long as American tariffs granted protection to shipping, foreign nations would continue to levy hostile tariffs against American vessels and prevent their successful competition. In 1828 Senator Levi Woodbury, of New Hampshire, said:

"By this bill we now hold out the olive branch to all. If our terms are accepted, we may obtain most of the transportation now enjoyed by foreigners in the eight- or ten-hundredths of our foreign tonnage; as they are now enabled to compete with us to that extent, chiefly by the discrimination they enjoy at home."[1]

The extension of the provisions for shipping reciprocity with the various foreign nations is indicated in the following table.

TABLE 83.—*List of treaties establishing shipping reciprocity.*[2]

Nation.	Year.	Nation.	Year.
Partial reciprocity:		Full Reciprocity—*continued:*	
Great Britain	1816	Mexico	1848
Holland	1817	New Granada	1848
Norway-Sweden	1818	Great Britain	1849
France	1823	Guatemala and Costa Rica	1852
Holland, Prussia, Lubeck, Hamburg, Bremen, Norway, Oldenburg, Sardinia, Russia, Denmark	1826	Salvador	1852
Central America	1826	Peru	1852
Norway-Sweden[3]	1828	Holland[3]	1853
Great Britain[3]	1828	Argentina	1854
Martinique and Guadaloupe	1828	Sicily	1856
Brazil	1828	Papal States	1858
Prussia	1829	Denmark[3]	1858
Full reciprocity:		Belgium	1859
British North America and West Indies	1830	Paraguay	1860
Austro-Hungary	1831	Venezuela	1861
Spain	1832	Ottoman Porte	1862
Mexico	1832	Bolivia	1862
Russia	1832	Liberia	1863
Mecklenburg-Schwerin	1834	Honduras	1865
Portugal, Madeira, Porto Santo, and Azores	1836	Haiti	1866
Tuscany	1836	Dominican Republic	1867
Venezuela	1836	Nicaragua	1868
Greece	1838	Madagascar	1868
Sardinia	1839	Italy	1871
Holland	1839	Japan	1872
Hanover	1840	France[3]	1873
Portugal	1840	Salvador[3]	1874
Ecuador	1842	Peru[3]	1874
Cayenne	1842	Belgium[3]	1875
Sicily	1845	Korea	1882
Belgium	1846	Madagascar[3]	1883
Hanover[3]	1846	Spanish Islands	1886
Oldenburg[3]	1847	Spain[3]	1887
Mecklenburg-Schwerin[3]	1847	Peru[3]	1888
		Tobago	1891
		Philippine Islands	1898
		Japan	1898
		Spain[3]	1902
		Japan[3]	1911

[1]Bates, *The American Marine*, 117.
[2]From *Tariff Laws*, and *Cong. Record*, 59 Cong., 2 sess., XLI, pt. v, Feb. 13, 1907.
[3]Extension or renewal.

At various times reciprocity was suspended to favor particular nations, but only temporarily, and for the purpose of further removing foreign restrictions against American vessels. For example, in 1872 it was suspended in the case of French vessels in the indirect trade, but after France had removed her discriminations, it was at once reenacted.

The original intent of shipping reciprocity was to benefit American shipping, but its ultimate effect in this respect was detrimental. It was the American marine and not those of foreign nations which declined in the subsequent free competition. There might have been considerable decline even if shipping protection had been retained, but the force of competition was greatly increased by the introduction of shipping reciprocity.

TRADE RECIPROCITY TREATIES.

During the second period of tariff legislation the most important provisions enacted with the intent of promoting foreign commerce were those providing for commercial reciprocity. The first treaty of this character was the one made with Canada in 1855. It provided for commercial reciprocity as to a large number of agricultural and forest products.

This treaty favored Canada more than the United States. It was negotiated at the time when protectionism was in disfavor, and was intended as the first step toward free trade.[1] With the exception of rice, cotton, tar, pitch, turpentine, and tobacco, practically all the articles included in the treaty were those of which Canada had a surplus. The manufactured products which the American exporter desired to market in the provinces were not included in the treaty provisions, and in order to replenish the revenue lost because of the free trade in agricultural products, Canada at once increased the tariff on those of the manufacturing industries. During the years from 1855 to 1859 the rates on molasses were increased from 16 to 30 per cent, on boots and shoes from 12.5 to 25 per cent, and on cotton, woolen, silk, and iron goods from 12.5 to 20 per cent. Imports from Canada increased rapidly, but the effect upon the market for the products of the United States was unfavorable.

When, in 1866, the renewal of the treaty was under consideration, hostile sentiment had become so strong that it failed. The main reasons for this hostility were: (1) public opinion had returned to protection; (2) there was a strong sentiment against Canada and Great Britain because of their attitude during the Civil War; (3) the pro-southern party in England was attempting to weaken the relations of the United States with Canada; (4) special interests were "pressed by Canadian competition, forcing them to reduce prices to the consumer where otherwise they would have found it easy to maintain

[1] Stanwood, *American Tariff Controversies*, II, 136.

them;"[1] and (5) the United States had gained less from the commercial arrangement than had Canada. The treaty was not commercially satisfactory, but the political influences mentioned played an important rôle at the time of its discontinuance. Charles F. Adams went so far as to say that "all these measures [for discontinuance] were the result rather of a strong political feeling than of any commercial considerations."[2]

The Canadians felt that they had lost an advantageous arrangement, and scarcely a decade passed before they attempted to negotiate a new reciprocity treaty. In this they were successful in 1873, but the Senate failed to ratify the treaty. After the enactment of the tariff act of 1909, which permitted the application of the minimum tariff to Canadian imports by reason of certain Canadian concessions on American exports, negotiations for complete reciprocity were mutually renewed. A comprehensive reciprocity treaty which had the approval of the President, of Congress, and of the Canadian Ministry, and which was drafted along lines which both Canadian parties had long recognized as desirable, was negotiated in 1911. Political opposition to the treaty, however, developed in Canada, and "the agreement was denounced [by the Canadian voters] as the forerunner of annexation," and, "in order to demonstrate a loyalty which might have been taken for granted it was considered necessary to sacrifice unquestioned economic advantages."[3]

The Hawaiian reciprocity treaty, which became effective in 1876, and which was renewed with but slight changes in 1887, continued until the annexation of the islands, and, in striking contrast with the Canadian experiment, was both politically and commercially successful. It placed practically all the products of the Hawaiian Islands upon the free list, and practically all American exports to the islands, especially those of the manufacturing industries, were likewise admitted free of duty. Immediately after the treaty became effective, the export trade to Hawaii increased from $662,164 in 1876 to $1,272,949 in 1877, and the import trade from $1,376,681 to $2,550,335. Throughout the twenty-two years of the treaty's life both the import and export trade increased, with but few interruptions.

The chief aim of the Hawaiian treaty, however, was political. The opinion was commonly expressed at the time of its negotiation that, unless the United States secured control of the islands, they would fall into the hands of Great Britain. They were believed to be desirable as a stepping-stone to the markets of the Orient, and it was hoped that the treaty would finally result in annexation. The clause which prevented Hawaii from extending similar privileges to other nations, and

[1] Laughlin and Willis, *Reciprocity*, 64.
[2] House Exec. Doc., 39 Cong., 1 sess., I, pt. i, 111.
[3] O. D. Skelton (a Canadian), "Canada's Rejection of Reciprocity," in *Journal of Political Economy*, XIX, 1911, p. 730.

the clause which granted the free entrance of all her chief products into the United States, were highly instrumental in confining Hawaiian commerce almost exclusively to the United States, and in causing an extensive investment of American capital in Hawaiian sugar plantations and general industries. When this was accomplished, the political annexation of the islands came about as the successful result of the reciprocity treaty.

In 1883 a comprehensive reciprocity treaty was negotiated with Mexico, but owing to the refusal of the Congress of the United States to pass the legislation necessary to carry the treaty into effect, although the time originally fixed for its ratification was extended in 1885 and again in 1886, the convention failed to become operative.

These, however, were but isolated treaties, and no general provisions for reciprocity were enacted until 1890. The movement was supported by Secretary Blaine, who, even at this time, when the manufacturing surplus was relatively small, said:

> "I wish to declare the opinion that the United States has reached a point where one of its highest duties is to enlarge the area of its foreign trade. . . . I mean the expansion of trade with countries where we can find profitable exchanges."

These countries, he believed, were Mexico and the republics of Central and South America. His aim was to inaugurate free trade upon the Western Hemisphere in a large number of articles.

RECIPROCITY AGREEMENTS UNDER THE McKINLEY AND DINGLEY ACTS.

Though the reciprocity desired by Secretary Blaine was defeated by those interested in the wool, copper, wood, and ore industries,[1] the advocates of an extension of the foreign markets succeeded in enacting a provision for limited retaliation. Section 3 of the McKinley act provided that if the President believed that any nation exporting sugar, molasses, coffee, hides, or "any such articles," imposed duties upon American products which he considered reciprocally unequal, he might remove these imports from the free list and impose upon them the duties specified by law. As is shown in table 84, on page 345, under this section of the McKinley act, agreements were made with Germany, Austria-Hungary, and various countries of the West Indies and Central and South America. The effect of these agreements was, however, but slight, because all were virtually abrogated by the Wilson act of 1894. Germany removed the restrictions against American meats and levied the conventional German tariff on most of the agricultural imports; and Austria-Hungary accorded "most-favored-nation" treatment to American products. The trade with both of these nations was favorably affected, but of all the agreements with the West India Islands and Central and South America, the Cuban

[1]Stanwood, II, 280, Speech of Senator Gibson, of Louisiana.

agreement alone resulted in an increased trade. In the remainder of these markets trade was as yet so undeveloped that it would have been unreasonable to expect a spontaneous response to tariff arrangements which were operative but two or three years. The McKinley agreements contained the basis for an expansion of foreign commerce, but they were terminated by the Wilson act in 1894.

Three years after the enactment of the Wilson act, the Republican party was overwhelmingly successful, and protectionist sentiment reached its climax. Though there was again a demand for increased foreign markets, protectionism was so strong that the reciprocity provisions of the Dingley act of 1897 were distinctly weaker than those of seven years prior. The first part of section 3, which was apparently intended primarily for France and Germany, provided that the President might negotiate reciprocity agreements by reducing the tariffs upon argols, crude tartar, wine lees, brandies, spirits, champagne and sparkling wines, still wines, vermuth, paintings, and statuary. The second part of this section contains an equally scanty list of articles—coffee, tea, tonka beans, vanilla beans, or "any such articles"—and was inserted to favor the Central and South American republics. Besides these provisions, the act contained a section which upon paper appears far-reaching, but which in reality was inserted rather for policy than for expected results. Section 4 provided that within two years the President might negotiate reciprocity treaties with any country, admitting imports free of duty or at rates not more than 20 per cent below those specified in the act, in return for concessions to American exports, but that such treaties required approval by Congress before going into effect.

In spite of the meagerness of the provisions of section 3, two groups of reciprocity agreements were successfully negotiated. The first group, which became effective shortly after the enactment of the law, comprised the agreements with France, Germany, Portugal, Italy, and Switzerland. In return for favorable duties on certain articles of French manufacture, the French agreement extended the minimum tariff acts of France to some 21 American products. The German agreement, in return for the same concessions, granted to the United States the same tariff rates as Germany had accorded to six neighboring countries and annulled the regulations providing for the inspection of American dried and evaporated fruits. The concessions obtained under the Italian agreement of 1900 affected but a small number of articles, and those obtained under the Portuguese agreement of the same year were comparatively inconsequential. The Swiss agreement of 1898, which was in effect but little over two years, was the result of the peculiar wording of the most-favored-nation clause contained in the general commercial treaty of 1850.

The second group of reciprocity agreements made under section 3 of the Dingley act of 1897 were negotiated in the years 1906 to 1908.

The concessions obtained from, and granted to, France were increased somewhat by a supplementary agreement in 1908. When, in 1907, a new German tariff act threatened to discriminate against American exports, the German agreement was superseded by a revised agreement whereby the United States granted the lowest tariff rates on sparkling wines in addition to those on the commodities previously included in the agreement of 1900, and in return secured the minimum German tariff rates on about 96.5 per cent of the wares shipped from the United States to Germany. A supplementary Italian agreement was adopted in 1909, and the Portuguese agreement was amended in 1907. A new reciprocity agreement with Switzerland was negotiated in 1906; in the same year an agreement was entered into with Bulgaria; in 1906 and 1909, with Spain; and in 1907, with Great Britain and the Netherlands. Since all of these later treaties were short-lived, and some of them applicable to but a small number of commodities, their effect upon the foreign trade was small.

As is seen in table 84, on page 345, the agreements with but four countries—France, Germany, Italy, and Portugal—were in effect a reasonable length of time. Since the Italian and Portuguese agreements were based on but a small number of articles, their combined effect was limited. The French and German agreements, however, were partly responsible for the rapid advance in the trade with those countries. The imports from France increased from a value of $52,731,000 in 1898 to $108,387,000 in 1909, and the exports to France during the same years advanced from $95,459,000 to $108,764,000. The imports from Germany grew from $97,375,000 in 1900 to $168,805,000 in 1909, and the exports to that country during the life of the German agreements grew from $187,348,000 to $249,556,000. All the agreements negotiated under section B of the tariff act of 1897 were terminated by the act of 1909.

Eleven reciprocal treaties were negotiated under section 4 of the tariff act of 1897, shortly after the enactment of that law, but not one was ever ratified by the Senate.[1] The tariff sentiment at that time was so strongly protective that Congress frowned upon any effort at comprehensive reciprocity.

The last reciprocal tariff arrangement entered into by the United States was the Cuban treaty of 1903. Cuba, by her position, is commercially bound to the United States; yet, largely because of Spanish possession, and prohibitive tariffs fixed by Spain, the natural tendencies of trade were for decades so diverted that Cuban merchants, though their chief markets were in America, bought but few American products. Even as late as 1904 the United States provided markets

[1]These treaties, known as the Kasson treaties, were negotiated with Jamaica, Turks and Caicos Islands, Barbados, Bermuda, British Guiana, Dutch West Indies, Dominican Republic, Nicaragua, Ecuador, Argentina, and France.

for 83.6 per cent of Cuba's exports, but furnished only 42.7 per cent of her imports. Political enthusiasm was doubtless an important factor in the negotiations, but there was also a permanent desire, resulting from the interest in the development of the export trade of the United States, to stimulate the American trade with Cuba.

TABLE 84.—*List of reciprocity treaties and agreements.*

Nature.	Country.	Effective.	Terminated.
Treaty	Canada	Nov. 16, 1855	Nov. 17, 1866.
Treaty	Hawaiian Islands	Sept. 9, 1876	Apr. 30, 1900.
Agreements under sec. 3 of McKinley act.	Brazil	Apr. 1, 1891	Aug. 27, 1894.
	Santo Domingo	Sept. 1, 1891	
	Great Britain for:		
	Barbados	Feb. 1, 1892	
	Jamaica	Feb. 1, 1892	
	Leeward Islands	Feb. 1, 1892	
	Trinidad and Tobago	Feb. 1, 1892	
	Windward Islands (excepting Grenada)	Feb. 1, 1892	
	British Guiana	Apr. 1, 1892	
	Salvador	Feb. 1, 1892	
	Nicaragua	Mar. 12, 1892	
	Honduras	May 25, 1892	
	Guatemala	May 30, 1892	
	Cuba and Porto Rico	Sept. 1, 1891	
	Germany	Feb. 1, 1892	
	Austria-Hungary	May 26, 1892	
Agreements under sec. 3 of Din ley act.	France	June 1, 1898	Oct. 31, 1909.
	France (supplementary)	Feb. 1, 1908	Do.
	Germany	July 13, 1900	Feb. 6, 1910.
	....do	July 1, 1907	Do.
	Portugal, Azores, Madeira	June 12, 1900	Aug. 7, 1910.
	Portugal (supplementary)	Jan. 24, 1907	Do.
	Switzerland	June 1, 1898	Nov. 23, 1900.
	....do	Jan. 1, 1906	Oct. 31, 1909.
	Italy	July 18, 1900	Aug. 7, 1910.
	Italy (supplementary)	Apr. 24, 1909	Do.
	Great Britain	Dec. 5, 1907	Feb. 7, 1910.
	Netherlands	Aug. 12, 1908	Aug. 7, 1910.
	Bulgaria	Sept. 15, 1906	Oct. 31, 1909.
	Spain	Aug. 1, 1906[1]	Aug. 7, 1910.
	Spain (supplementary)	Feb. 20, 1909[1]	Do.
Treaty	Cuba	Dec. 27, 1903	Still in force.

[1]Date of signature.

To accomplish this it was found that section 3 of the Dingley act was inadequate, and the negotiations resulted, not in an executive agreement limited to a scanty list of commodities, but in a treaty. Congress authorized its negotiation December 17, 1903, in an enabling act which virtually revived section 4 of the tariff act of 1897. In the treaty which became effective on December 27, 1903, and which is still operative, the United States agrees to admit all dutiable products of Cuba at a reduction of 20 per cent of the general tariff rates, and Cuba agrees to admit a long list of enumerated American products at reductions of 25, 30, and 40 per cent, and all other dutiable goods at a reduc-

tion of 20 per cent. The United States and Cuba, moreover, mutually agreed that the concessions granted in the treaty shall be distinctly preferential and shall be extended to no other nation.

The growth of trade with Cuba in recent years had been almost spectacular, and was effectively stimulated by the treaty. In 1900 the imports from Cuba were valued at $31,371,704, and in 1913 at $126,088,000. Similarly, in 1900, the exports of American products to Cuba were valued at $25,236,808, as compared with $70,581,000 in 1913. The United States now provides a market for over 87 per cent of all the exports of Cuba, and provides the island with about 53 per cent of its imports.

MISCELLANEOUS TARIFF PROVISIONS TO PROMOTE TRADE.

As is shown in table 85, page 349, numerous miscellaneous tariff provisions designed to promote foreign commerce have been enacted from time to time. From the very beginning re-export drawbacks were granted, the first tariff act authorizing a drawback of 99 per cent on numerous articles and the second, on all imported commodities re-exported in accordance with prescribed regulations. Subsequent legislation was somewhat less liberal. In 1861, however, a general drawback of 90 per cent was extended to all re-exports, and in 1890 the original basis of 99 per cent was re-established. Regulations have likewise been made from time to time for the bonding of goods in storage and in transit.

As stated in Chapter XXXIX, ship-building materials are admitted duty free. In 1872 materials to be used in the building of wooden vessels engaged in the foreign trade and materials to be used in the repair of American vessels engaged in the foreign trade were permitted to enter free of duty. In 1890 the materials to be used in the construction of iron and steel as well as wooden vessels engaged in the foreign trade were permitted to enter free of duty. These provisions had no appreciable effect, because vessels so constructed were permitted to engage in the coastwise trade but two months annually. In 1909 the provision regarding the coastwise trade was extended to six months, and in 1912 the restriction was entirely abolished, and the privilege of importing building and repair materials free of duty was extended to the domestic as well as to the foreign trade, and to foreign as well as to American vessels built in the United States.

The act of 1913, which is at present applicable, permits materials used in the construction of vessels, whether engaged in the foreign or domestic trade, and materials used to repair American vessels engaged in the foreign trade, to enter free of import duties. These liberal provisions have thus far had little effect, because the prices of American and foreign iron and steel have in recent years been so readjusted that there has been little occasion to import ship-building materials from abroad.

The Panama Canal act of August 24, 1912, so revised the registry laws of the United States as to permit foreign-built vessels not more

than five years old to be registered under the American flag, provided they engage only in the foreign trade and are owned by American citizens or by American corporations, the president and managing directors of which are citizens of the United States. This so-called policy of "free shipping" in the foreign trade displaced the long-standing policy which had restricted American registry to American-built vessels. The act of August 18, 1914, enacted because of the scarcity of ocean vessels created by the European War, repealed the requirement that the foreign-built ships were not to be more than five years old, and authorized the President temporarily to suspend certain provisions of the laws governing the registry of foreign vessels under the American flag.

An important innovation which, but for its short life, might have had far-reaching effects upon the foreign trade, was adopted in 1909. The protective tariff act of that year embodied the double tariff system, which many of the commercial nations of the world had adopted and which some of them were so utilizing as to restrict American exports. The Payne-Aldrich act of 1909 terminated the various reciprocity agreements which had been negotiated under section 3 of the Dingley act of 1897, and instead provided two schedules of duties—a minimum schedule applicable to countries which do not unduly discriminate against American products, and a maximum schedule consisting of the minimum rates plus 25 per cent ad valorem, which was generally applicable, unless the President by proclamation suspended it in favor of particular countries. The negotiations which followed the adoption of this dual tariff principle resulted in the removal of many undue discriminations. The Secretary of State reported in 1910 that the United States had for the first time secured complete equality of tariff treatment from Germany, also valuable concessions from France, and advantages not formerly enjoyed at the hands of other countries. While certain instances of discrimination continued, the President was able to report in his message of 1912 that the Department of State had been able to secure "substantial most-favored-nation treatment from all the countries of the world."

The Underwood tariff act of 1913 repealed the dual tariff policy and returned to the policy of trade reciprocity. It authorizes the President to negotiate trade agreements "wherein mutual concessions are made looking toward freer trade relations and further reciprocal expansion of trade and commerce," subject to ratification by a majority vote of both houses.

SUMMARY.

An analysis of the tariff schedules shows that, throughout the entire tariff history, provisions have been inserted for the purpose of promoting foreign commerce. During the first period of tariff legislation (1789–1818) the chief provisions of this character were those designed to promote the Oriental trade and to protect American shipping.

During the second period (1818–1909) the reciprocity treaties and agreements were of primary importance as regards the direct promotion of foreign commerce. It is, moreover, probable that the numerous provisions of this character had an appreciable effect upon the development of the foreign commerce of the United States.

When, however, the provisions of the second period are regarded as part of the aggregate tariff policy of the United States, both their number and importance are strikingly secondary. The controlling policy during most of the time was protection, designed to promote the domestic rather than the foreign market. As early as 1791 Alexander Hamilton argued[1] that a foreign market is both small and unstable, and that a "domestic market is greatly to be preferred." When, after the War of 1812, the infant industries were threatened by a flood of foreign imports, and the farmers were complaining of an unstable market for their products, the home-market argument was strongly emphasized. The argument was made effective in 1820, when the demand for a domestic market caused the western and middle agricultural interests to favor protection, and the intent of tariff legislation as regards foreign commerce during the entire period before the reaction of 1846 was that expressed by Henry Clay:

"It is most desirable that there should be both a home and a foreign market: But with respect to their relative superiority I can not entertain a doubt. The home market is first in order and paramount in importance."

From 1846 to 1861 there was a reaction towards freer trade, but after the Civil War a protectionist policy was followed. Even during the first administration of President Cleveland the home-market argument was successfully appealed to. The McKinley act, though it contained the most important reciprocity provisions ever enacted by Congress, established tariff rates that were highly protective. The Dingley tariff law of 1897, enacted when protectionism was at its height, contained reciprocity provisions which were weaker than those of 1890, and its restraining effect upon foreign imports was decidedly greater.

During the third period (beginning with 1909) greater attention has been given to the promotion of the foreign trade in the drafting of tariff laws. The protective acts of 1909 and the tariff-reduction act of 1913 differ widely as to the treatment of foreign imports and as to the method of developing foreign markets. The former aimed to protect home industries and home markets and to promote the export trade by applying the dual tariff policy, while the latter reduced the duties on imports and made provision for the negotiation of reciprocity treaties. The friends and opponents of protection now substantially agree that the development of foreign markets for exports is essential to American industries.

---

[1]*Report on Manufactures* (1791), 33.

The following table contains a digest of the provisions that have been inserted in the many tariff and tonnage-tax laws of the United States from 1789 to 1913 to promote foreign commerce, American shipping, and ship-building.

TABLE 85.—*Provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building.*[1]

Year.	Section.	Provision.
July 1789[2]	1	Reduced duty on tea from India and China in American vessels.
	4	10 per cent discount on imports in American vessels.
Aug. 1790	1	Reduced duty on tea from India and China in American vessels.
	2	10 per cent discount on imports in American vessels.
	3	99 per cent re-export drawback.
Mar. 1791[2]	4	Bounty on dried and pickled fish and salted provisions.
May 1792[2]	5	10 per cent discount on imports in American vessels.
June 1794[2]	4	10 per cent increase on imports in foreign vessels.
Jan. 1795[2]	5	Do.
Mar. 1797[2]	3	Do.
July 1797[2]	....	
May 1800[2]	3	Do.
Mar. 1804[2]	3	Do.
	6	Tonnage duty of 50 cents ("light money") on foreign vessels.
Mar. 1805	1	Sec. 6 of March 1804 defined.
July 1812[2]	2	10 per cent increase on imports in foreign vessels.
	3	Light money increased to $1.50.
Jan. 1813	2	10 per cent increase on imports in foreign vessels.
Mar. 1815[3]	1	10 per cent discrimination repealed in direct trade with nations granting reciprocal privileges.
Feb. 1816[2]	....	
Apr. 1816[2]	3	10 per cent increase on imports in foreign vessels except where otherwise provided by law or treaty.
Jan. 1817[3]	2	Tonnage duty of $2 against vessels of nations barring American vessels.
Apr. 1818	24	Export bonding regulations.
Apr. 1818[3 4]	....	
Mar. 1819[4]	....	
Apr. 1820[2]	....	
May 1820	1	Tonnage duty of $18 on French vessels.
May 1822[3]	1	President to negotiate relative to shipping in the British West India trade.
	2	French tonnage discrimination to be suspended upon suitable arrangements by the President.
Mar. 1823	1-4	French tonnage discriminations suspended.
Jan. 1824[3]	4	President may grant reciprocal tonnage favors to certain nations.
May 1824[4]	....	
May 1828[2 3]	1	10 per cent discrimination repealed in indirect trade with nations granting reciprocal privileges.
May 1830[2]	....	
July 1832[3]	3	Further extension of reciprocal tonnage favors.
July 1832[2 4]	3	Eastern teas and various tropical goods in American vessels on free list.
Sept. 1841[2]	....	
Aug. 1842[2 4]	9	Do.
	11	10 per cent discrimination against foreign vessels in Eastern trade.

[1]Compiled from statutes of United States.
[2]Re-export drawbacks on certain articles under prescribed regulations.
[3]For application of this law to different nations, see table 83.
[4]Ten per cent discrimination against foreign vessels, except where otherwise provided by law or treaty.

TABLE 85.—*Provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping and ship-building*[1]—Continued.

Year.	Section.	Provision.
July 1846[2]	I[3]	Coffee and tea on free list in American or foreign vessels entitled to reciprocity.
May 1848	1	Coast vessels may do a limited foreign trade.
Nov. 1855	....	Canadian Reciprocity Treaty.
Mar. 1857	3	Schedule I of July 1846 on tea and coffee re-enacted.
Mar. 1861[2]	23	Do.
	27	Re-export bonding of railroad iron.
Aug. 1861[4]	4	90 per cent re-export drawback.
July 1862	14	10 per cent additional duty on eastern cargoes shipped from west of Good Hope.
Mar. 1863[2]	1	Bonding regulations.
	2	Sec. 14 of July 1862 suspended.
June 1864[4]	18	Sec. 14 of July 1862 re-enacted, except on certain goods.
July 1866	2	Vessels in Hawaiian trade pay tonnage once annually.
May 1871	....	Treaty with Great Britain and Canada.
June 1872[2]	10	Articles for building wooden ships in foreign trade free.
	10	Articles for repairing American ships in foreign trade free.
Oct. 1872	1	Shipping reciprocity with France in indirect trade suspended.
Feb. 1873	1	Act of October 1872 relative to French vessels annulled.
Mar. 1873	1	Fish oil, fish, etc., admitted free from Canada.
	3–4	Regulation of Canadian transit trade.
Sept. 1876	....	Hawaiian Reciprocity Treaty.
May 1882	1	Discrimination on eastern goods imported from west of Good Hope removed.
Dec. 1882	1	Discrimination on eastern goods imported from west of Good Hope and held in storage, removed.
Mar. 1883[2,4]	2497	No imports from nations barring American vessels, except in American or foreign vessels entitled to reciprocity.
June 1884[2]	....	
June 1884	....	Tonnage act.
June 1886	....	Tonnage act amended.
Nov. 1887	....	Hawaiian reciprocity treaty renewed.
Oct. 1890[4,5]	....	McKinley act.
	3	Reciprocity provision.
	8	Articles for building ships in foreign trade free.
	9	Articles for repair of American vessels in foreign trade free
	15–16	Free lumber from St. John and St. Croix Rivers.
	18–19	Sec. 2497 of March 1883 re-enacted.
	25	99 per cent re-export drawback.
Dec. 1890	1	Rebate on tobacco in certain instances.
Mar. 1891	....	McKinley act not to impair Hawaiian treaty.
July 1892	....	An act to enforce the Canadian treaty.
Aug. 1892	1	Retaliatory measure to enforce Canadian treaty.
Aug. 1894[4]	....	Wilson act.
	7	Articles for building ships in foreign trade free.
	8	Articles for repairing American ships in foreign trade free.
	9	Regulations for bonding cargoes.
	15	Sec. 2497 of March 1883 re-enacted.
	22	99 per cent re-export drawback.
July 1897[4,5,6]	....	Dingley act:
	3	Reciprocity agreements.
	4	Reciprocity treaties.
	12	Sec. 7 of Wilson act renewed.

[1]Compiled from statutes of United States.
[2]Re-export drawbacks on certain articles under prescribed regulations.
[3]Number of schedule.
[4]Ten per cent discrimination against foreign vessels, except where otherwise provided by law or treaty.
[5]For application of reciprocity provisions, see table 84.
[6]Countervailing duties on certain articles.

TABLE 85.—*Provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building*[1]—Continued.

Year.	Section.	Provision.
July 1897[2,3,4]	13	Sec. 8 of Wilson act renewed.
	15–16	Regulations for bonding cargoes.
	20–21	Provisions as to St. John and St. Croix lumber.
	30	99 per cent re-export drawback.
	491	Binding twine not on free list, if the American product is charged a duty.
	626	Petroleum not on free list, if the American product is charged a duty.
	675	Sulphuric acid not on free list, if the American product is charged a duty.
July 1897	1	Partial shipping reciprocity may be granted in return for partial shipping rights.
Dec. 1903	....	Cuban reciprocity treaty.
Aug. 1909[3,4]	....	Payne-Aldrich act.
	1	Par. 428. Drawback on coal used by American vessels in foreign trade.
	1	Minimum tariff rates.
	2	Maximum tariff rates.
	3	Cuban treaty not terminated.
	4	Reciprocity agreements terminated.
	19	Articles for building ships in foreign trade free.
	20	Articles for repairing American ships in foreign trade free.
	23–24	Regulation for bonding cargoes.
	25	99 per cent re-export drawback.
	36	Tonnage-tax law revised.
Mar. 1910	....	Do.
Aug. 1912	....	Panama Canal act.
	5	Articles for building and repairing ships in foreign and domestic trade free.
	5	Free shipping in foreign trade.
Oct. 1913[3]	....	Underwood act.
	4A	Reciprocity agreements authorized
	4B	Cuban treaty not terminated, except as to article 8.
	4J4	Regulations for bonding cargoes.
	4J5	Articles for building ships in foreign and domestic trade free.
	4J6	Articles for repairing American registered ships free.
	4G7	Discount of 5 per cent on imports in American vessels; treaties not to be impaired.
	4, O	99 per cent re-export drawback.

[1]Compiled from statutes of United States.
[2]Ten per cent discrimination against foreign vessels, except where otherwise provided by law or treaty.
[3]For application of reciprocity provisions, see table 84.
[4]Countervailing duties on certain articles.

BIBLIOGRAPHY.

REFERENCES ON BIBLIOGRAPHY.

References on bibliography, 352. Colonial trade and trade to 1789, 353. Domestic commerce, 354. The foreign trade, 1789–1914, 356. Trade with non-contiguous possessions, 359. Fisheries, 360. Government aid and commercial policy, 361. General references, 364; on colonial trade and trade to 1789, 370; on domestic commerce, 374; on the foreign trade, 1789–1914, 377; on trade with non-contiguous possessions, 382; on fisheries, 384; on Government aid and commercial policy, 385.

There is no formal bibliography concerning the history of the commerce of the United States. E. L. Bogart, in his *Economic History of the United States* (2d ed., 1912), gives a list of selected references at the close of each chapter and a general list of works on economic history at the close of the volume. The bibliographical material in Clive Day, *History of Commerce* (1907), is excellent, though the space devoted to the United States is necessarily limited. Katharine Coman, *Industrial History of the United States* (rev. ed., 1910), contains marginal references and a short bibliography. Various portions of Channing, Hart and Turner, *Guide to the Study and Reading of American History* (rev. ed., 1912), especially §§ 35, 38, 53, 122, 125, 171, 182, 189, 190, 194, 201, 216, 220, 245, 248, 250, 253, 259, 260, 261, and 264 give a well-selected list of works on the economic development of the nation. This work also gives (§ 26) a list of the indexes to public documents and a list (§ 24) of other useful indexes. The recent bibliography, S. J. Buck, *Travel and Description, 1765–1865* (Collections of the Illinois State Historical Library, vol. IX, Bibliographical Series, vol. II, 1914), though compiled primarily for the use of students of Illinois history, is nevertheless of value to students in the general field of American history. Special lists of works on topics closely related to commercial history have been issued by the Library of Congress, among the most valuable of which are A. P. C. Griffin, *A List of Books on Mercantile Marine Subsidies* (1903, 1906), *List of Works on Reciprocity with Canada* (1907), *List of Works on the Tariffs of Foreign Countries* (1906); Griffin and Meyer, *List of References on Reciprocity* (1910), and H. H. B. Meyer, *Additional References Relating to Reciprocity with Canada* (1911), *Additional References to Mercantile Marine Subsidies* (1911).

Several general works on the history of the United States contain bibliographies with sections devoted to economic and commercial history. Of especial importance is A. B. Hart (ed.), *The American Nation* (27 vols. 1904–1907), and in no other recent general work on the United States has more attention been given to economic questions or more care given to the preparation of bibliographical material. In Justin Winsor, *Narrative and Critical History of America* (vol. VIII, 1889, pp. 489–94), a short list of the best authorities on the economic history of the United States is given, together with a complete bibliography of accounts of travelers who visited the country before 1820. The constant employment of newspaper sources by J. B. McMaster in

his *History of the People of the United States* (8 vols. 1883–1913) renders his work invaluable as a guide to the great mass of information bearing on commercial activities which may be found in newspapers.

The list of indexes of Federal documents to be found in Channing, Hart and Turner's *Guide* (§ 26) has already been mentioned. The most convenient index is the *Checklist of United States Public Documents, 1789–1909* (vol. 1, 1911) prepared by the Superintendent of Documents. Other especially valuable indexes of Federal documentary material are B. P. Moore, *Descriptive Catalogue of Government Publications* (1885); J. M. Baker, *Finding List to Important Serial Documents Published by the Government* (Sen. Doc. No. 238, 56 Cong., 2 sess., 1901); *Index to Reports of Committees of the House of Representatives* (1887); *Index to Reports of Committees of the Senate* (1887); and Superintendent of Documents, *Monthly Catalogue, United States Documents* (1895 ——).

The most useful lists of State publications are R. R. Bowker, *State Publications: A Provisional List of the Official Publications of the Several States* (4 parts, 1899–1908), and Adelaide R. Hasse, *Index of Economic Material in Documents of the States of the United States* (Carnegie Inst. Wash. Pub. No. 85, 1907–1915). So far the latter work includes 13 States—Maine, New Hampshire, Vermont, New York, Rhode Island, Massachusetts, California, Illinois, Kentucky, Delaware, Ohio, New Jersey, and Pennsylvania.

COLONIAL TRADE AND TRADE TO 1789.

The bibliography of the commerce of the colonial period was considered at length in two notes appended to Chapter VI of Volume One, pages 112 to 117. The first of the notes discussed the scope and limitations of the sources of statistical information, and the second note reviewed the documentary sources.

The documentary sources of greatest volume and value are in England, and are, for the most part, unpublished. Students using these documents will be assisted by Prof. C. M. Andrews's report upon "Materials in British Archives for American Colonial History" (*American Historical Review*, x, 1904–1905); also his *Guide to the Materials for American History to 1783, in the Public Record Office of Great Britain* (2 vols., 1912–1914); and Andrews and Davenport, *Guide to the Manuscript Materials for the History of the United States to 1783, in the British Museum, in Minor London Archives, and in Libraries of Oxford and Cambridge* (1908). A report was made in 1905 upon "Materials on Commerce in the Various Depositories in London," by Dr. Albert A. Giesecke. This report is in unpublished typewritten form. A copy has been deposited in the Library of the University of Pennsylvania, Philadelphia, Pennsylvania, and another copy with the Department of History of the Carnegie Institution of Washington, Washington, D. C.

The notes and bibliography in Dr. Giesecke's volume upon *American Commercial Legislation Before 1789* (1910) will be of much assistance

Transportation by Water (1908), gives a fair idea of the volume of the coastwise trade. The *Report of the Chief of Engineers of the United States Army* (annual), the Report of the Commissioner of Corporations, *Transportation by Water in the United States* (4 parts, 1909–1913) and the *Preliminary Report of the Inland Waterways Commission* (1908) are the other important Government documents containing material on the coastwise commerce and on lake and river trade. The publication of the Interstate Commerce Commission, *Statistics of Railways in the United States* (annual since 1887), is the leading official publication dealing with the statistics of railways and their traffic.

For the period previous to 1860 the best available sources of information concerning domestic commerce are *Niles' Register* (75 vols., 1812–1849), *Hunt's Merchants' Magazine* (63 vols., 1840–1870) and *DeBow's Review* (40 vols., 1846–1870), Hazard, *Register of Pennsylvania* (16 vols., 1828–1835), and J. D. B. DeBow, *The Industrial Resources of the Southern and Western States* (3 vols. 1852–1853).

Contemporary accounts of internal improvements usually indicate the general conditions of trade. Among the most accurate and reliable are Samuel H. Mitchell, *Compendium of all the Internal Improvements of the United States* (1835); H. S. Tanner, *A Description of the Canals and Railroads in the United States* (1840); and the description of railroads in Andrews, *Report on Lake Commerce*. Full accounts of early canals and railways may also be found in *Niles' Register* and *Hunt's Merchants' Magazine*. The leading sources of information with respect to Erie Canal traffic are *Laws of the State of New York, in Relation to the Erie and Champlain Canals, together with the Annual Reports of the Canal Commissioners* (1825) and subsequent reports of the Canal Commissioners. Among the later works on early canals and railroads the best are J. L. Ringwalt, *Development of Transportation Systems in the United States* (1888), H. V. Poor, *Sketch of the Rise and Progress of Internal Improvements* (in *Manual of Railroads*, 1881), A. L. Bishop, *The State Works of Pennsylvania* (1907), Chester Lloyd Jones, *The Economic History of the Anthracite Tide-Water Canals* (1908), G. W. Ward, *The Early Development of the Chesapeake and Ohio Canal Project* (1899), A. Barton Hepburn, *Artificial Waterways of the World* (1914), and E. J. Benton, *The Wabash Trade Route* (1903).

Descriptions by travelers and personal reminiscences afford interesting and valuable information concerning internal commerce during the years before 1860, though they must be used with discrimination on account of the personal bias of the writers. Among the most valuable of such works may be mentioned: Isaac Weld, *Travels Through the States of North America, 1795, 1796 and 1797* (1799); Timothy Dwight, *Travels in New England and New York, 1796–1815* (4 vols., 1821–22); Morris Birkbeck, *Notes on a Journey in America* (2d ed., 1818, and many other editions), Timothy Flint, *Recollections of the Past Ten Years, 1815–1825* (1826); J. Hall, *Letters from the West* (1828), *Notes on Western States* (1838), *Statistics of the West* (1836); Harriet Martineau, *Society*

in America (3 vols., 1837); Michael Chevalier, *Society, Manners and Politics in the United States, 1834–1835* (1839); J. S. Buckingham, *Eastern and Western States* (1842), *Slave States* (1842), *America, Historical, Statistical and Descriptive* (1841); F. L. Olmstead, *The Cotton Kingdom* (1861); Charles R. Weld, *A Vacation Tour in the United States and Canada* (1855); Josiah Gregg, *Commerce of the Prairies* (1845); and Sir S. Morton Peto, *Resources and Prospects of America* (1866). The best collection of accounts of travelers is R. G. Thwaites (ed.), *Early Western Travels, 1748–1846* (32 vols., 1904–1907).

The leading works on the economic and commercial development of the United States before 1860, besides contributions to the periodicals mentioned and personal narratives, were Tench Coxe, *A View of the United States of America* (1794); Adam Seybert, *Statistical Annals* (1818); Timothy Pitkin, *Statistical View of the Commerce of the United States* (1817; 2d ed., 1835); *Eighty Years Progress* by various authors (1860); Daniel Lord, *The Effect of Secession on the Commercial Relations between the North and South* (1861).

For material on domestic commerce since 1860 the best sources of information are the Government documents above referred to, reports of commercial organizations in leading cities, such as the *Annual Report of the Chicago Board of Trade* (1858 ——), and *Annual Report of the New York Chamber of Commerce* (1855 ——), trade publications, such as the *Commercial and Financial Chronicle* (1865 ——) and the *Journal of Commerce* (1827 ——).

No work dealing primarily with domestic trade has been published, though in numerous works on economics and general history discussions of the growth of domestic trade may be found. Leading works are E. L. Bogart, *Economic History of the United States* (2d ed., 1912); Katharine Coman, *Industrial History of the United States* (rev. ed., 1910); Clive Day, *History of Commerce* (1907); C. M. Depew (ed.), *One Hundred Years of American Commerce* (2 vols., 1896); Theodore Roosevelt, *Winning of the West* (4 vols., 1889–1896); J. B. McMaster, *History of the People of the United States* (8 vols., 1883–1913); and A. B. Hart (ed.), *The American Nation* (27 vols., 1904–1907). G. S. Callender, *Selections from the Economic History of the United States, 1765–1860* (1909), is an extremely valuable compilation of material on economic and commercial history before 1860.

THE FOREIGN TRADE, 1789–1914.

Much has been written upon the history of the foreign trade of the United States, but there is no single comprehensive work which covers the subject. Among the many books on commerce and industry which deal to some extent with the foreign trade of the United States are Clive Day, *History of Commerce* (1907); W. C. Webster, *General History of Commerce* (1903); John Yeats, *The Growth and Vicissitudes of Commerce* (1887); and James D. Whelpley, *The Trade of the World* (1913).

There are also various general industrial and economic histories which discuss the foreign trade of the United States, such as E. L. Bogart, *Economic History of the United States* (2d ed., 1912); A. S. Bolles, *Industrial History of the United States* (1878), R. H. I. Palgrave, *Dictionary of Political Economy* (3 vols., 1894–1899); J. R. McCulloch, *Dictionary of Commerce and Commercial Navigation* (2 vols., 1852); C. M. Depew (ed.) *One Hundred Years of American Commerce* (2 vols., 1895); and J. L. Bishop, *History of American Manufactures from 1608 to 1860* (3 vols., 1868). Some of the general histories of the United States, moreover, deal with the history of the foreign trade, particularly J. B. McMaster, *History of the People of the United States* (8 vols., 1883–1913), and to a less extent all those listed below under "General References." These being general works which discuss many phases of history, their authors do not attempt to present fully the history of the foreign trade.

The leading sources from which detailed information of the foreign trade is obtainable are the general statistical publications of the United States and public documents dealing with particular periods, with the trade with particular countries, with the foreign trade in particular industries or commodities, with the foreign trade of particular ports or sections of the country, and with the organization of the foreign trade.

The general statistical documents of the United States Government are listed in the appended bibliography, but special mention may be made of the report *Commerce and Navigation* (annual since 1822), the *Statistical Abstract of the United States* (annual since 1877), and the *Monthly Summary of Commerce and Finance* (monthly since 1893). Special attention is also called to the many statistical reports of the Bureau of Statistics and Bureau of Manufactures now consolidated in the Bureau of Foreign and Domestic Commerce of the Department of Commerce, to those of the Consular Service, of the Division of Foreign Markets, which was, in 1903, consolidated with the Bureau of Statistics in the Department of Agriculture, and of the Bureau of Navigation in the Department of Commerce.

The early foreign trade of the United States is treated in some of the works listed below in the bibliography under "Colonial Trade and Trade to 1789," but in addition there are such early works as Adam Seybert, *Statistical Annals* (1818); Timothy Pitkin, *A Statistical View of the Commerce of the United States of America* (2d ed., 1835); J. D. B. DeBow, *Industrial Resources of the Southern and Western States* (3 vols., 1852–53), and *Review* (40 vols., 1846–1870); Tench Coxe, *A View of the United States of America* (1794); *Hunt's Merchants' Magazine*; *Niles' Register*; C. H. Evans, *Statistics of Imports—Duties, 1867–1883* (1884), and *Domestic Exports from the United States to all Countries, 1789–1883* (1884); J. S. Homans, Jr., *An Historical and Statistical Account of the Foreign Commerce of the United States, 1820–1856* (1857); the report of the State Department, *Commercial Relations of the United States with*

Foreign Countries (1856–57); John McGregor, *Commercial Statistics of the United States* (3 vols., 1850); J. P. Brissot, *The Commerce of America with Europe*, etc. (1795); W. P. Stern, "The Foreign Trade of the United States, 1820–1840" (*Journal of Political Economy*, VIII, Dec., 1899); the report of the Treasury Department, *The Statistics of the Foreign and Domestic Commerce of the United States* (1864); and E. D. Fite, *Social and Industrial Conditions in the North During the Civil War* (1910).

Late periods are treated in various Government reports. Especial attention is called to the following compilations in the *Monthly Summary of Commerce and Finance: Exports of Manufactures from the United States and their Distribution by Articles and Countries, 1790–1902* (April 1903); *Exports of Domestic Manufactures and Imports of Manufacturers' Materials* (May 1903); and *American Commerce, 1821–1898* (June 1899).

The trade of the United States with numerous particular foreign countries is discussed by the Bureau of Statistics in special issues of the *Monthly Summary of Commerce and Finance*, and in special reports listed below in the bibliography under "The Foreign Trade, 1789–1914." The reports of the United States Consular Service and special reports of the United States Bureau of Manufactures likewise contain many data on the trade with particular countries. Especially valuable in this connection is the British *Board of Trade Journal* (1881 ——). There are a few secondary works dealing with the foreign trade between the United States and particular foreign countries, such as S. J. Chapman, *History of Trade Between the United Kingdom and the United States* (1899); A. Hale, *The South Americans—A Story of the South American Republics*, etc. (1907); Matias Romero, *Mexico and the United States* (1898); and F. R. Rutter, *The South American Trade of Baltimore* (Johns Hopkins University Studies, XV, No. 9, Sept. 1897).

The bibliography dealing with the foreign trade in particular industries and commodities is especially voluminous. Some of the special reports of the various departments of the Federal Government deal expressly with the foreign trade in certain commodities, and much material is to be found in the general statistical publications of the departments of the Treasury, Commerce, and Agriculture, and in those of the United States Bureau of Corporations on the beef, iron and steel, lumber, mineral oil, tobacco, and farm machinery industries. Many of the books and reports on particular industries which are listed below under "General References" in the bibliography contain important data bearing directly upon the foreign trade.

No effort is made in the list of works in the bibliography, under "The Foreign Trade, 1789–1914," to include a complete bibliography on the organization of the foreign trade, because that would necessitate a detailed bibliography on transportation, shipping, etc. Especial attention is, however, called to the report on *Cotton Exchanges* (4 parts and summary, 1908), *Transportation by Water in the United States* (4 parts, 1909–1913), and *Transportation of Petroleum* (1906), by the United States

Bureau of Corporations; the report on *Submarine and Land Telegraph Systems of the World* (1902), by the Bureau of Statistics; the reports on *Telegraph Systems in 1907* (1909) and *Transportation by Water in 1906* (1908), by the Bureau of the Census; the report on *The Investigation of Shipping Combinations*, by the House Committee on the Merchant Marine and Fisheries (4 vols., 63 Cong., 1913–14); E. K. Chatterton, *Steamships and their Story* (1910); A. H. Clark, *The Clipper Ship Era, 1843–1869* (1911); Charles S. Hill, *History of American Shipping*, etc. (1883); B. O. Hough, *Elementary Lessons in Exporting* (1909); E. R. Johnson, *Panama Canal Traffic and Tolls* (1912) and *Ocean and Inland Water Transportation* (1906); Hans Keiler, *American Shipping, Its History and Economic Conditions* (1913); W. S. Lindsay, *History of Merchant Shipping and Ancient Commerce* (4 vols., 1876); W. L. Marvin, *American Merchant Marine* (1902); Royal Meeker, *History of Shipping Subsidies* (1905); John B. Moore, *Digest of International Law* (vol. v, 1906); J. Russell Smith, *Organization of Ocean Commerce* (1905); William M. Malloy (compiler), *Treaties, Conventions*, etc., *Between the United States and Other Powers, 1776–1909* (2 vols. 1910); Garfield Charles (compiler), *Treaties, Conventions*, etc., *Between the United States and Other Powers, 1910–1913* (1913; a supplement [vol. III] to Malloy, *Treaties, Conventions*, etc., 2 vols., 1910); G. M. Fisk, *International Commercial Policies* (1910); George Paish, *The Trade Balance of the United States* (in Publications of National Monetary Commission, 1910); and J. R. Soley, The *Maritime Industries of America* (in Shaler, *The United States of America*, ed. of 1897).

TRADE WITH NON-CONTIGUOUS POSSESSIONS.

As in the case of the foreign trade of the United States, the official source of the statistics of the early trade between the United States and its non-contiguous territories is the annual report *Commerce and Navigation of the United States*. Other Government documents containing statistics of the early trade with these possessions are the special reports contained in the *Monthly Summary of Commerce and Finance* which are listed below, the various bulletins issued by the Division of Foreign Markets of the Department of Agriculture, the special reports of the Bureau of Statistics of the Treasury Department and later of the Department of Commerce and Labor, the reports of the United States Consular Service, and the *Statistical Abstract of the United States* (annual since 1877). The principal foreign statistical documents of the early trade are the *Diplomatic and Consular Reports of Great Britain*.

The early trade of the non-contiguous territories is also described in various general works. Among these are H. H. Bancroft, *History of Alaska* (vol. XXVIII of his *History of Pacific States*, 1886), and Joseph Schafer, *The Pacific Slope* (1904). The early Hawaiian trade is described in W. D. Alexander, *Relations between the Hawaiian Islands and Spanish America in Early Times* (Papers of Hawaiian Historical

Society, No. 1, 1892); W. F. Blackman, *The Making of Hawaii*, 1899); E. J. Carpenter, *America in Hawaii*, etc. (1899); J. J. Jarvis, *History of the Hawaiian Islands* (1872); and Caspar Whitney, *Hawaiian America*, etc. (1899). The early trade of Porto Rico is described in R. A. van Middeldyk, *History of Porto Rico* (1903), and the early trade of the Philippine Islands in Blair and Robertson, *The Philippine Islands, 1493–1898* (55 vols., 1903–1909); Antonio De Morga, *History of the Philippine Islands*, etc. (2 vols., 1907); and J. Foreman, *The Philippine Islands* (3d ed., 1906).

The statistics of the later trade with the non-contiguous possessions are published in the United States Government documents mentioned in connection with their earlier trade and also in the reports of the Customs and Insular Affairs Division of the War Department, in the reports of the Census Office, of the governors of Porto Rico and Alaska and of the Philippine Commission, and in the *Monthly Summary of Commerce and Finance*. Much information is contained in G. W. Davis, *Report on the Industrial and Economic Conditions of Porto Rico* (1900); C. H. Forbes-Lindsay, *America's Insular Possessions* (2 vols., 1906); J. Foreman, *The Philippine Islands* (3d ed., 1906); W. H. Taft, *Special Report to the President on the Philippines* (1908); Thomas G. Thrum, *Hawaiian Almanac and Annual* (1884 ——); and the *Report of the Alaska Railroad Commission* (1913).

FISHERIES.

The most extensive and most reliable fund of material on the history of American fisheries is to be found in the reports and bulletins of the United States Fish Commission (since 1903 the Bureau of Fisheries). A complete list of those publications may be found in the *Checklist of United States Public Documents, 1789–1909* (vol. 1, 1911, pp. 316, 317, 331–334, 406–409). Statistics of fisheries for 1880 and 1889 were included in reports of the Tenth and the Eleventh Census. The special report of the Census, *Fisheries of the United States in 1908* (1911), is especially valuable.

Lorenzo Sabine, *Report on the Principal Fisheries of the American Seas* (1853), prepared for the Treasury Department, ranks as a classic in the history of American fisheries, though it constantly shows the bias of the author in favor of fishing bounties. The work of G. Brown Goode and associates, *The Fisheries and Fishery Industries of the United States* (5 sections, 7 vols., 1884–1887), prepared through the cooperation of the Commissioner of Fisheries and the Superintendent of the Tenth Census, has been by far the best comprehensive historical work. Raymond McFarland, *History of the New England Fisheries* (1911), and Walter S. Tower, *A History of the American Whale Fishery* (1907), are important recent works on the history of the fisheries. Both have good bibliographies.

Complete details of the controversy with Great Britain concerning the fisheries of the northeastern coast may be found in *Proceedings in the North Atlantic Coast Fisheries Arbitration* (Sen. Doc. No. 870, 61 Cong., 3 sess., 12 vols., 1912). The *Proceedings of the Fur-Seal Arbitration Tribunal* (15 vols., 1895) contains an account of the fur-seal question. The convention with Great Britain, Japan, and Russia for the protection of the seal fisheries, which became effective December 15, 1911, may be found in Garfield Charles, *Treaties, Conventions*, etc., *of the United States, 1910–1913* (1913), and discussions of the convention are included in the *Annual Report of the Commissioner of Fisheries* (1910–1913).

GOVERNMENT AID AND COMMERCIAL POLICY.

Of the aid and regulation of commerce by governmental authority in the United States, but little has been written in a comprehensive way, and recourse must be had largely to public documents dealing with specific phases of the subject or to the annual reports of the various governmental agencies concerned, such as the Weather Bureau, Steamboat-Inspection Service, Coast and Geodetic Survey, Bureau of Lighthouses, Life-Saving Service, and Bureau of Immigration. Emory R. Johnson, *Ocean and Inland Water Transportation* (1906), contains a brief historical outline of the activities of Federal administrative agencies dealing with commerce by water, and discusses policies of governmental regulation. The book considers the causes that have led to the present condition of the American merchant marine and discusses the means of building it up.

The pamphlets published by the Bureau of Foreign and Domestic Commerce, entitled *Promotion of Commerce*, contain outlines of the commercial services performed by the various Federal offices and bureaus. The *Congressional Directory* is a useful reference-book on questions relating to the detailed organization of the Federal Government, and, beginning with the issue of 1877, has contained summary statements of the functions of the various administrative departments, bureaus, and offices. The *Checklist of United States Public Documents, 1789–1909* (vol. I, 1911), moreover, affords a historical outline of the origin of Federal agencies of government and of changes in their organization, besides providing an invaluable bibliography of public documents. Information relating particularly to the most important of the executive departments, from the viewpoint of commerce, is contained in the publication by the Department of Commerce and Labor dealing with its *Organization and Law* (1904). John A. Fairlie, *National Administration* (1905), although written from the viewpoint of the political scientist, gives an outline of the history of the development of the different departments and contains a concise summarization of their functions.

Chester Lloyd Jones, *History of the Consular Service of the United States* (1906), is a study of the origin, history, and activities of the service, based on official records and documents. It contains a good

bibliography. Emory R. Johnson's paper on "The Early History of the Consular Service, 1776–1792" (*Political Science Quarterly*, XIII, No. 1, March 1898) gives an account of the origin of the service.

The *Annual Reports of the Commissioner of Navigation* are invaluable to the student of maritime questions, containing, as they do, not only discussions of current questions of governmental policy, but embodying also the results of investigations into the practice of this and other nations with respect to such matters as mail subsidies, shipping taxation, and registry laws. The statistical data concerning shipping and ship-building, contained in these reports, give a clear view of the progress of these important industries. The four reports on *Transportation by Water in the United States* (1809–1913), prepared by the Commissioner of Corporations, contain much historical material.

W. L. Marvin, *American Merchant Marine* (1902), is popularly written, but contains much upon both the romance and the history of the merchant marine. William Bates, *American Navigation* (1902), presents many deatils, but the book is poorly organized and is not so much a history as a brief advocating bounties and discriminating duties. The reports of the Lynch Committee on Causes of the Reduction of American Tonnage (House Doc. No. 28, 41 Cong., 2 sess., 1870) and of the *Merchant Marine Commission* (Sen. Doc. No. 2755, 58 Cong., 3 sess., 1905) are valuable documents dealing with the history, decline, and means of re-establishing the maritime interests of the country. A valuable monograph upon shipping and ship-building is that by J. F. Crowell, "The Shipping Industry of the United States and its Relation to the Foreign Trade" (*Monthly Summary of Commerce and Finance*, Dec. 1900). The monograph discusses American shipping policy, historically and statistically, in a scientific spirit.

Among the public documents upon waterway improvements, mention may be made of the *Preliminary Report of the Inland Waterways Commission* (1908), which contains valuable information upon current waterway projects and policies. Its appendices, particularly those relating to State canals and the present waterway system of the United States, provide a more comprehensive picture of present internal waterways than is to be found elsewhere. The *Final Report of the National Waterways Commission* (1912) discusses American waterway improvement policy in all its phases. The compilation, *Laws Relating to the Improvement of Rivers and Harbors from August 11, 1790, to March 4, 1907* (House Doc. No. 425, 58 Cong., 3 sess., 2 vols., 1907), together with the *Annual Report of the Chief of Engineers, United States Army*, and reports of Congressional committees on rivers and harbors appropriations are invaluable sources evidencing the historical progress of waterway improvements.

CLASSIFIED LIST OF BOOKS ON HISTORY OF COMMERCE.

GENERAL REFERENCES.

ADAMS, BROOKS. *American Economic Supremacy* (1900).
ALDRICH, N. W. Report by, from the Committee on Finance. *Wholesale Prices, Wages and Transportation* (Senate Doc. No. 1394, 52 Cong., 2 sess., 4 vols., March 3, 1893).
ALLEN, LEWIS F. *American Cattle: Their History, Breeding and Management* (1868).
AMERICAN COTTON MANUFACTURERS' ASSOCIATION. *Proceedings of Annual Convention* (1897–).
AMERICAN IRON AND STEEL ASSOCIATION. *Statistics of the American and Foreign Iron Trades* (annual, 1872–).
AMERICAN LUMBERMAN. *The Curiosity Shop, or Questions and Answers Concerning the Lumber Business* (1906).
ANDREWS, ISRAEL D. *On the Trade and Commerce of the British North American Colonies and upon the Trade of the Great Lakes and Rivers* (House Exec. Doc. No. 136, 32 Cong., 2 sess., p.1853).
ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *Federal Regulation of Industry* (July 1908), *American Business Conditions* (Nov. 1909), *American Produce Exchanges* (Sept. 1911), *The Cost of Living* (July 1913).
AUSTIN, O. P. *Steps in the Expansion of our Territory* (1904).
AVERY, E. M. *A History of the United States and its People* (vols. I–VII, 1904–1910).

BABCOCK, KENDRIC C. *Rise of American Nationality* (vol. XIII of *The American Nation*, 1906).
BAKER, RAY STANNARD. *Our New Prosperity* (1900).
BALLAGH, JAMES C. (ed.). *Economic History of the South* (1910).
BANCROFT, GEORGE. *History of the United States* (10 vols., last revision, 1884).
BANCROFT, HUBERT H. *History of the Pacific States of North America* (34 vols., 1882–1890).
BANKERS' MAGAZINE AND STATISTICAL REGISTER (New York, 1846–).
BASSETT, JOHN S. *The Federalist System* (vol. XI of *The American Nation*, 1906).
BATCHELDER, S. *Introduction and Early Progress of the Cotton Manufacture in the United States* (1863).
BATES, CHARLES A. *American Supremacy* (1901).
BATES, WILLIAM B. *American Navigation* (1902).
BENHAM, W. H. *Trade and Trade Centers of History* (1907).
BISHOP, J. L. *History of American Manufactures, from 1608 to 1860* (2 vols., 1864; 3 vols., 1868).
BITUMINOUS COAL TRADE ASSOCIATION. *A Report on the Present and Future of the Bituminous Coal Trade* (1908).
BOGART, ERNEST L. *Economic History of the United States* (2d ed., 1912).
BOLLES, A. S. *The Financial History of the United States* (3 vols., 1879–1886).
———. *The Industrial History of the United States* (1878).
BOSTON CHAMBER OF COMMERCE. *Annual Report* (1886–).
BRADSTREETS. *A Journal of Trade, Finance, and Public Economy* (1885–).
BREWER, W. H. *History of Agriculture in the United States* (U. S. Census 1880, vol. on *Agriculture*).
BRIGHAM, ALBERT PERRY. *Geographic Influences in American History* (1903).
BRISTED, JOHN. *The Resources of the United States of America* (1818).
BROOKS, C. P. *Cotton—Its Uses, Varieties, Fibre Structure, Cultivation and Preparation for Market as an Article of Commerce* (1898).
BROOMHALL, G. J. S. *Review of the World's Grain Trade, or the Corn Trade Year Book* (annual 1902–04); (*Annual Review of the Grain Trade, 1910–*).
BRUCE, PHILIP A. *The Rise of the New South* (vol. XVII, *The History of North America*, 1905).
BULLOCK, C. J. *Essays on Monetary History of the United States* (1900).
BURKETT, C. W. *Cotton—Its Cultivation, Marketing, Manufacture*, etc. (1906).
BURTON, THEODORE E. *Financial Crises and Periods of Industrial Depression* (1903).

CALLENDER, GUY S. *Selected Readings in the Economic History of the United States, 1765–1860* (1909).
CAMBRIDGE MODERN HISTORY (vol. VII, *The United States*, 1903).
CAREY and LEA. *The Geography, History, and Statistics of America* (1823).
CARNEGIE, ANDREW. *Triumphant Democracy or Fifty Years' March of the Republic* (1886).

CATTERALL, RALPH C. H. *The Second Bank of the United States* (1903).
CHADWICK, FRENCH E. *Causes of the Civil War* (vol. XIX of *The American Nation*, 1906).
CHANNING, EDWARD. *The Jeffersonian System* (vol. XII of *The American Nation*, 1906).
———. *The Story of the Great Lakes* (1909).
———. *Student's History of the United States* (1898).
CHICAGO BOARD OF TRADE. *Annual Report* (1858–).
COLANGE, L. DE. *Dictionary of Commerce* (2 vols., 1880).
COMAN, KATHARINE. *Industrial History of the United States* (1905; rev. ed., 1910).
COOK, W. W. *The Corporation Problem* (1891).
COOLIDGE, A. C. *The United States as a World Power* (1908).
COOPER, THOMAS. *Some Information Respecting America, 1793* (1794).
COPELAND, MELVIN T. *The Cotton Manufacturing Industry of the United States* (1912).
COXE, TENCH. *A View of the United States of America* (1794).
CROOKES, Sir WILLIAM. *The Wheat Problem* (1900).

DARBY and DWIGHT. *A New Gazetteer of the United States of America* (1833).
DAVIS, JOHN P. *The Union Pacific Railway* (1894).
DAY, CLIVE. *History of Commerce* (1907).
DEBOW, J. D. B. *DeBow's Review* (40 vols., 1846–1870).
———. *The Industrial Resources*, etc., *of the Southern and Western States* (3 vols., 1852–53).
———. *Statistical View of the United States, being a Compendium of the Seventh Census* (1854).
DEFEBAUGH, JAMES E. *History of the Lumber Industry of America* (4 vols., 1906–1909).
DEPEW, CHAUNCEY M. (ed.). *One Hundred Years of American Commerce* (2 vols., 1895).
DEWEY, D. R. *Financial History of the United States* (1903, 4th ed., 1912).
———. *National Problems* (vol. XXIV of *The American Nation*, 1907).
DONALDSON, THOMAS. *The Public Domain* (1884).
DONDLINGER, PETER T. *The Book of Wheat* (1908).
DONNELL, E. J. *Chronological and Statistical History of Cotton* (1872).
DUANE, WILLIAM J. *Narrative and Correspondence concerning the Removal of the Deposits and Occurrences connected therewith* (1838).
DU BOIS, W. E. B. *The Suppression of the African Slave Trade* (1896).
DUNNING, WILLIAM H. *Reconstruction, Political and Economic* (vol. XXII of *The American Nation*, 1907).
DUN'S REVIEW (weekly, 1824–).

EDGAR, WILLIAM C. *The Story of a Grain of Wheat* (1904).
ELLIS, ELLEN D. *An Introduction to the History of Sugar as a Commodity* (1905).
ELSON, HENRY W. *Story of Our Country* (1910); *History of the United States of America* (5 vols., 1908).
ELY, RICHARD T. *Monopolies and Trusts* (1900).

FAHIE, J. J. *A History of Wireless Telegraphy* (3d ed., 1902).
FERGUSON, A. M. J. *All About Tobacco* (1889).
FITE, E. D. *Social and Industrial Conditions in the North during the Civil War* (1910).
FLINT, CHARLES L. *A Hundred Years' Progress of American Agriculture* (Report of U. S. Commissioner of Agriculture, 1872, pp. 274–304).
FRENCH, B. F. *History of the Rise and Progress of the Iron Trade of the United States* (1858).

GALLATIN, ALBERT. *Report on Manufactures* (American State Papers, *Finance*, II, 425).
———. *Writings of Gallatin* (3 vols., edited by H. Adams, 1879).
GANNETT, H. *The Building of a Nation: Growth, Present Condition, and Resources of the United States* (1895).
GARNER and LODGE. *The History of the United States* (4 vols., 1906).
GARRISON, GEORGE P. *Westward Extension* (vol. XVII of *The American Nation*, 1906).
GRIFFIN, A. P. C. *Select List of Books*, etc., *Relating to Iron and Steel in Commerce* (Library of Congress, 1907).
GRIFFIN and MEYER. *List of References on Federal Control of Commerce and Corporations* (Library of Congress, 1913).

HADLEY, A. T. *Railroad Transportation, Its History and Its Laws* (1885).
HAMMOND, M. B. *The Cotton Industry* (American Economic Association, new series, No. 1, 1897).
HANEY, LEWIS H. *Business Organization and Combination* (rev. ed., 1914).
HART, A. B. *Guide to American History* (1896).
———. *Slavery and Abolition* (vol. XVI of *The American Nation*, 1906).
———. *Social and Economic Forces in American History* (1913).
——— (ed.). *Source Book of American History* (1900).
HASSE, ADELAIDE R. *Index of Economic Material in Documents of the States of the United States* (Carnegie Inst. Wash. Pub. No. 85, 1907–1915. States thus far covered: Maine, New Hampshire, Vermont, New York, Rhode Island, Massachusetts, California, Illinois, Kentucky, Delaware, Ohio, New Jersey, Pennsylvania).
HATFIELD, H. R. (ed.). *Lectures on Commerce* (1904).
HAZARD, SAMUEL. *United States Commercial and Statistical Register* (6 vols., 1840–1842).
HENRY, J. D. *History of Petroleum* (1873).
———. *Thirty-five Years of Oil Transportation—The Evolution of the Tank Steamer* (1907).
HOLDSWORTH, J. T. *The First Bank of the United States* (Publications, National Monetary Commission, 1910).
HOLMES, GEORGE K. *Progress of Agriculture in the United States* (Report, Department of Agriculture, 1899).
HOSMER, JAMES K. *The Appeal to Arms* (vol. XX of *The American Nation*, 1907).
———. *The Louisiana Purchase* (1902).
———. *Outcome of the Civil War* (vol. XXI of *The American Nation*, 1907).
HUEBNER, G. G. *Trade, Transportation and Commerce* (*American Year Book*, 1911, 1912, 1913).
HUNT, THOMAS F. *The Cereals in America* (1904).
HUNT'S MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW (63 vols., 1840–1870).

INGALLS, W. R. (formerly R. P. Rotherwell). *The Mineral Industry, Its Statistics, Technology and Trade* (annual, 1892–).
——— (ed.). *The Mineral Industry* (vol. XIV of *Engineering and Mining Journal*, 1906).

JACOBSTEIN, MEYER. *The Tobacco Industry in the United States* (Columbia University Studies, XXVI, No. 3, 1907).
JENKS, J. W. *The Trust Problem* (1903).
JOHNSON, EMORY R. *American Railway Transportation* (1903, rev. ed., 1908).
———. *Ocean and Inland Water Transportation* (1906).
———. Inland Waterways: Their Relation to Transportation (Supplement to *Annals of American Academy of Political and Social Science*, IV, 1893).
JOHNSON, J. F. W. *Notes on North America; Agricultural, Economical and Social* (2 vols., 1851).

KNOOP, DOUGLAS. *American Business Enterprise* (1907).

LAMB'S TEXTILE INDUSTRIES OF THE UNITED STATES (editor-in-chief, John H. Brown, vol. 1, 1911).
LARNED, J. N. *Literature of American History* (1902).
LATANÉ, JOHN H. *America the World Power* (vol. XXV of *The American Nation*, 1907).
LAUGHLIN, J. L. *Industrial America* (1906).
LAUGHLIN and WILLIS. *Reciprocity* (1903).
LAWSON, W. R. *American Industrial Problems* (1903).
LEE and THORPE (ed.). *The History of North America* (20 vols., 1903–1907).
LEROY-BEAULIEU, PIERRE. *The United States in the Twentieth Century* (translated by H. Addington Bruce, 1906).
LEWIS, M. E. *The Grain Business as a Profession* (1910).
LEWIS and CLARK, *Journals*, 1804–1806 (edited by R. G. Thwaites, 1904–1905).
LOSSING, J. B. *History of American Industries* (1878).
LYON and MONTGOMERY. *Examining and Grading Grain* (1907).

MCCULLOCH, J. R. *A Dictionary, Practical, Theoretical and Historical, of Commerce and Commercial Navigation* (edited by Henry Vethake, 2 vols., 1852).
MCDONALD, WILLIAM. *Jacksonian Democracy* (vol. XV of *The American Nation*, 1906).
———. *Documentary Source Book of American History* (1908).
MACGREGOR, JOHN. *Commercial Statistics of the United States* (3 vols., 1850).
MCMASTER, J. B. *A History of the People of the United States* (8 vols., 1883–1913).

MANUFACTURERS RECORD (weekly, 1882–).
MARVIN, W. L. *The American Merchant Marine* (1902).
MEEKER, ROYAL. *History of Shipping Subsidies* (American Economic Association Publications, 3d series, VI, No. 3, 1905).
MEYER, B. H. *Railway Legislation in the United States* (1903).
MONCRIEFF, A. R. H. *The World of Today* (6 vols., 1905).
MOORE, JOHN B. *Digest of International Law* (House Doc. No. 551, 56 Cong., 2 sess., 7 vols. and index vol., 1906).
——— *History and Digest of the International Arbitrations to which the United States has been a Party* (House Misc. Doc. No. 212, 53 Cong., 2 sess., 6 vols. 1898).
MORRISON, JOHN H. *History of American Steam Navigation* (1903).
MORSE, EDWARD L. *Samuel F. B. Morse, His Letters and Journals* (2 vols., 1914).
MYRICK, HERBERT. *The American Sugar Industry* (1899).
——— (ed.). *The Book of Corn* (1903).
MYRICK and KILLIBREW. *Tobacco Leaf* (1903).

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS. *Bulletin* (quarterly, 1869–).
NILES' WEEKLY REGISTER, NILES' NATIONAL REGISTER (75 vols., 1812–1849).
NEW YORK CHAMBER OF COMMERCE. *Annual Report* (1858–).
NEW YORK PRODUCE EXCHANGE. *Annual Report* (1868–).
NORTH, S. N. D. *The Wool Book* (1908).

OBERHOLTZER, E. P. *Philadelphia—A History of the City and Its People* (4 vols.).

PALGRAVE, R. H. I. *Dictionary of Political Economy* (3 vols., 1894–1899).
PITKIN, TIMOTHY. *A Political and Civil History of the United States of America* (2 vols., 1835).
———. *Statistical View of the Commerce of the United States*, etc., (1817; 2d ed., 1835).
PHILADELPHIA COMMERCIAL EXCHANGE, *Annual Report* (1854–).
POOR, H. V. *Manual of Railroads in the United States* (1868–).
POORE, BEN: PERLEY. *History of Agriculture in the United States* (Report of U. S. Commissioner of Agriculture, 1866, 498).
POPPLEWELL, FRANK. *Some Modern Conditions and Recent Developments in Iron and Steel Production in America* (1906).
PROCEEDINGS OF CONGRESS:
Annals of Congress, 1789–1824 (42 vols.).
Register of Debates, 1824–1837 (14 vols.).
Congressional Globe, 1833–1873 (46 vols.).
Congressional Record, 1873–

QUAINTANCE, H. W. *The Influence of Farm Machinery on Production and Labor* (American Economic Association Publications, 3d series, V, No. 4, 1904).

RHODES, J. F. *A History of the United States, from the Compromise of 1850* (7 vols., 1893–1906).
RIES, HEINRICH. *Economic Geology of the United States* (1905).
RIPLEY, WILLIAM Z. *Railroads, Finance and Organization* (1915).
———. *Railroads, Rates and Regulations* (1912).
——— (ed.). *Railway Problems* (1907).
——— (ed.). *Trusts, Pools and Corporations* (1905).
ROBERTS, PETER. *The Anthracite Coal Industry* (1901).
ROBINSON, E. V. *Commercial Geography* (1910).
ROGERS, J. M. *The Development of the North Since the Civil War* (1906).

SAN FRANCISCO CHAMBER OF COMMERCE. *Annual Report* (1851–).
SAUERBECK, AUGUSTUS (compiler). *The Course of Average Prices of General Commodities in England* (London, 1908).
SCHAFER, JOSEPH. *History of the Pacific Northwest* (1905).
———. *The Pacific Slope and Alaska* (1904).
SCHARF and WESTCOTT. *History of Philadelphia* (3 vols., 1884).
SCHOULER, J. *History of the United States of America* (6 vols., 1880–1889).
SCRIBNER'S STATISTICAL ATLAS OF THE UNITED STATES (1883).
SCRIVENOR, H. *A Comprehensive History of the Iron Trade*, etc. (1841 and 1854
SEMPLE, ELLEN C. *American History and its Geographic Conditions* (1903).
SEYBERT, ADAM. *Statistical Annals*, etc. (1818).

SHALER, N. S. *American Highways* (1896).
——— (ed.). *The United States of America* (2 vols., 1894).
SHAW, J. T. *The Wool Trade of the United States, Its Rise and Progress in Boston* (Sen. Doc No. 70, 61 Cong., 1 sess., 1909).
SHEPPARDSON, A. B. *Cotton Facts* (annual, 1841–).
———. *Cotton Futures* (1911).
SILK ASSOCIATION OF AMERICA. *Annual Report* (1872–).
SMART, WILLIAM. *Economic Annals of the 19th Century, 1802–1820* (1910).
SMITH, J. RUSSELL. *The Ocean Carrier* (1908).
———. *The Story of Iron and Steel* (1908).
SMITH, ROLLIN E. *Wheat Fields and Markets of the World* (1908).
SMITH, THEODORE C. *Parties and Slavery* (vol. XVIII of *The American Nation*, 1906).
SPARKS, EDWIN E. *National Development* (vol. XXIII of *The American Nation*, 1907).
SPEARS, J. R. *The American Slave Trade* (1900).
SPICER, A. D. *The Paper Trade* (1907).
STANWOOD, EDWARD. *American Tariff Controversies in the Nineteenth Century* (2 vols., 1903).
STEVENS, HORACE J. (changed to W. H. Weed in 1912). *The Copper Handbook* (periodically 1901–).
SULLIVAN, J. W. *Markets for the People* (1913).
SURFACE, GEORGE T. *The Story of Sugar* (1910).
SWANK, J. M. *American Iron Trade in 1876* (1876).
———. *History of the Manufacture of Iron in all Ages* (1884, 2d ed., 1892; see also Tenth Census, II, 769–890).
———. *Iron and Steel at the Close of the Nineteenth Century* (Geological Survey, *Mineral Resources of the United States*, 1900, 1901).
———. *Statistics of the Iron and Steel Production of the United States* (1880).

TARBELL, IDA M. *History of the Standard Oil Company* (2 vols., 1904).
TARIFF BOARD, UNITED STATES. *Cotton Textiles* (1912).
———. *Wool and Manufactures of Wool* (2 vols., 1912).
TAUSSIG, F. W. *Tariff History of the United States* (6th ed., 1914).
——— (ed.). *State Papers and Speeches on the Tariff* (1892).
TERRY, HUBERT L. *India Rubber and its Manufacture* (1908).
TOMPKINS, D. A. *Cotton Mill—Commercial Features* (1899).
TOWER, WALTER S. *The Story of Oil* (1909).
TROTTER, SPENCER. *The Geography of Commerce* (1903).
TUCKER, GEORGE. *Progress of the United States in Wealth and Population* (1843).
TURNER, FREDERICK J. *Rise of the New West* (vol. XIV of *The American Nation*, 1906).

UNITED STATES:
Congress—
House Reports—
Proceedings of the Committee on the Merchant Marine and Fisheries in the Investigation of Shipping Combinations (4 vols., 63 Cong., 1913–14).
Senate Reports—
Report of Select Committee on Transportation Routes to the Seaboard (No. 307, 43 Cong., 1 sess., III, parts I and II, 1874).
Departmental Publications—
Department of Agriculture—
Secretary, *Annual Report* (1889–). Annual report on agriculture, published as part of *Report of Commissioner of Patents*, 1837–1862; *Annual Report of Commissioner of Agriculture*, 1862–1888.
———. *Year Book* (1894–).
Forest Service (Division of Forestry, 1880–1901; Bureau of Forestry, 1901–1905). General publications and *Bulletins*.
Department of Commerce—
Bureau of the Census (Census Office, 1790–1903. Connected with Department of State, 1790–1849; with Department of Interior, 1849–1903; with Department of Commerce and Labor, 1903–1913). (*Reports*, (final volumes) decennial since 1790).

UNITED STATES—Continued.

Departmental Publications—Continued.

Department of Commerce—Continued.

Bureau of the Census, etc.—Continued.

Special Reports—especially—

Manufactures, 1905 (4 parts, 1907–08).

Telegraphs and Telephones in 1902 (1906).

Transportation by Water in 1906 (1908).

Bureau of Corporations (connected with Department of Commerce and Labor, 1903–1913).

Reports of Commissioner of Corporations, as follows:

Beef Industry (1905).

Cotton Exchanges (4 parts and summary, 1908).

Cotton Tare (1912).

The International Harvester Company (1913).

The Lumber Industry (parts 1 to 3, 1913–1914).

Petroleum Industry (3 parts, 1907–1909).

The Steel Industry (3 parts, 1911–1913).

Tobacco Industry (4 parts, 1909–1911).

Transportation of Petroleum (1906).

Transportation by Water in the United States (4 parts, 1909–1913).

Bureau of Foreign and Domestic Commerce (in Department of Commerce and Labor, 1912–1913).

Foreign Commerce and Navigation of the United States (annual, 1820– . Prepared from 1820 to 1866 in office of the Register of the Treasury; from 1867 to 1912 by the Bureau of Statistics, which was connected with the Department of the Treasury, 1866–1903; with the Department of Commerce and Labor, 1903–1912. Part 2 of this report in 1876, 1880, 1882, 1886, 1887, 1888, 1890, and 1891, and part 3 in 1878 and 1884, were on Internal Commerce).

Monthly Summary of Commerce and Finance (monthly, 1896– . Prepared, from 1896 to June 1912, by Bureau of Statistics, which was connected with the Department of Treasury, 1866–1903; with Department of Commerce and Labor, 1903–1912. With the issue of July 1914 the title became *Monthly Summary of the Foreign Commerce of the United States*. The *Monthly Summary of Commerce and Finance* was preceded by monthly reports of the director (later chief) of the Bureau of Statistics (1867–1875), the *Summary Statement of Imports and Exports* (monthly, July 1875–December 1894) and *Finance, Commerce and Immigration* (monthly, January 1895–December 1895). The following issues containing monographs as indicated are of especial value:

The Grain Trade of the United States (Jan. 1900).

The Provision Trade of the United States (Feb. 1900).

The Cotton Trade of the United States (March 1900).

The Coal Trade of the United States (April 1900).

The Iron and Steel Trade of the United States (Aug. 1900).

The Lumber Trade of the United States (Nov. 1900).

The Shipping Industry of the United States (Dec. 1900).

The Territorial Expansion of the United States (Sept. 1901).

The World's Sugar Production and Consumption (Jan. 1902).

Progress of the United States in its Material Industries, 1800–1900 (Jan. 1902).

Submarine and Land Telegraph Systems of the World (July 1902).

Statistical Abstract of the United States (annual, 1878– . Prepared by Bureau of Statistics, 1878–1912).

Bureau of Navigation (in Department of Treasury, 1884–1903; in Department of Commerce and Labor, 1903–1913).

Navigation Laws of the United States (1911). Supplements in 1912 and 1913.

Department of the Interior—

Geological Survey. *Mineral Resources of the United States* (annual, 1883– ; as part of the *Annual Report of the Geological Survey*, 1895–1900).

UNITED STATES—Continued.
Departmental Publications—Continued.
Department of the Treasury:
Secretary, *Statistics of Foreign and Domestic Commerce of the United States, embracing Historical Review and Analysis*, etc. (1864).
Government Printing Office—
Superintendent of Documents, *Checklist of United States Public Documents, 1789–1909* (vol. I, 1911).
———. *List of Publications Relating to Interstate Commerce, Roads, Inland Waterways, Merchant Marine*, etc. (1910).
Industrial Commission—
Reports (19 vols., 1900–1902). Especially vol. VI, *Distribution of Farm Products;* vols. IV and IX, *Transportation;* and vol. XIX, *Final Report.*
Inland Waterways Commission—
Preliminary Report (Senate Doc. No. 325, 60 Cong., 1 sess., 1908).
National Waterways Commission—
Final Report (Senate Doc. No. 469, 62 Cong., 2 sess., 1912).

VOGT, PAUL L. *The Sugar Refining Industry in the United States* (Publications, University of Pennsylvania, 1908).

WARDEN, DAVID B. *A Statistical, Political and Historical Account of the United States* (3 vols., 1819).
WATTERSON and VAN ZANDT. *Tabular Statistical View of the United States, 1818–1827* (1829).
WEBSTER, W. C. *A General History of Commerce* (1903).
WEEKS, JOSEPH D. *Tin and Tin Plate, Their History, Production and Statistics* (1892).
WHITE, HORACE. *Money and Banking* (1896, 3d. ed., 1908).
WHITESHOT, CHARLES A. *The Oil Well Drillers. A History of the World's Greatest Enterprise, the Oil Industry* (1905).
WILLIAMS, G. W. *History of the Negro Race in America, 1619–1880* (1883).
WILSON, J. G. *Memorial History of the City of New York* (4 vols., 1891–1893).
WILSON, WOODROW. *The History of the American People* (5 vols., 1902).
WINDOM, WILLIAM. *Report of Select Committee on Transportation Routes to the Seaboard* (Sen. Doc. No. 307, 43 Cong., 1 sess., III, parts I and II, 1874).
WING, J. E. *Sheep Farming in America* (1907).
WINSOR, JUSTIN. *Memorial History of Boston* (4 vols., 1880–1882).
——— (ed.). *Narrative and Critical History of America* (8 vols. 1884–1889).
WRIGHT, CARROLL D. *The Industrial Evolution of the United States* (1907).
———. *Report on the Factory System* (Tenth Census, II, 1883, p. 529).
WRIGHT, CHESTER W. *Wool Growing and the Tariff* (1910).
WYCKOFF, WILLIAM C. *The Silk Goods of America* (1879).
———. *Silk Manufacturers in the United States* (1883).
WOODBURY, LEVI. *A Report on the Cultivation, Manufacture and Foreign Trade of Cotton* (Exec. Doc. No. 146, 24 Cong., 1 sess., 1836).
WOOLMAN and MCGOWAN. *Textiles. A Handbook for the Student and the Consumer* (1913).

YOUNG, T. M. *The American Cotton Industry* (1903).

COLONIAL TRADE AND TRADE TO 1789.

AMERICAN HISTORICAL ASSOCIATION. *Annual Report for the Year 1893.*
ANDERSON, A. *An Historical and Chronological Deduction of the Origin of Commerce* (4 vols., 1787–1789).
ANDREWS, CHARLES M. *British Committees, Commissions and Councils of Trade and Plantations, 1622–1675* (Johns Hopkins University Studies, XXVI, 1908).
———. "Colonial Commerce," in *American Historical Review*, XX, October 1914.
———. *The Colonial Period* (1912).
———. *Colonial Self-Government* (vol. V of *The American Nation*, 1904).

ANDREWS, CHARLES M. *Guide to the Materials for American History, to 1783, in the Public Record Office of Great Britain* (Carnegie Inst. Wash. Pub. No. 90A, 2 vols., 1912, 1914).
——. "Materials in British Archives for American Colonial History," in *American Historical Review*, x (1904).
ANDREWS and DAVENPORT. *Guide to the Manuscript Materials for the History of the United States, to 1783, in the British Museum, in Minor London Archives, and in Libraries of Oxford and Cambridge* (Carnegie Inst. Wash. Pub. No. 90, 1908).
ARNOLD, B. W. *History of Tobacco Industry in Virginia* (Johns Hopkins University Studies, xv, Nos. 1 and 2, 1897).
ARNOLD, S G. *History of the State of Rhode Island, 1636–1790* (2 vols., 1894).
ASHLEY, W. J. "The Commercial Legislation of England and the American Colonies, 1660–1760," in *Quarterly Journal of Economics*, vol. XIV, Nov. 1899.

BACON, E. M. *English Voyages of Adventure and Discovery* (1908).
BEARD, C. A. *An Economic Interpretation of the Constitution of the United States* (1913).
BEER, GEORGE L. *British Colonial Policy*, 1754–1765 (1907).
——. *The Commercial Policy of England toward the American Colonies* (Columbia College Studies, III, No. 2, 1893).
——. *The Old Colonial System, 1660–1754* (2 vols., 1913).
——. *The Origins of the British Colonial System, 1578–1660* (1908).
BERNARD, SIR FRANCIS. *Select Letters on the Trade and Government of America* (1764).
BOARD OF TRADE JOURNALS, 1675–1782 (90 vols.; in Library, Historical Society of Pennsylvania, Philadelphia).
BOARD OF TRADE PAPERS. *Plantations General, 1689–1780* (31 vols.; in Library, Historical Society of Pennsylvania, Philadelphia).
——. *Proprieties, 1697–1776* (24 vols.; in Library, Historical Society of Pennsylvania, Philadelphia).
BOLLES, ALBERT S. *Pennsylvania—Province and State, 1609–1790* (1899).
BOURNE, E. G. *Spain in America* (vol. III of *The American Nation*, 1904).
BRADFORD, W. *History of Plymouth Plantation* (ed. by W. C. Ford, 2 vols., 1913).
BRIGHAM, C. S. (ed.). *British Royal Proclamations relating to America, 1603–1783* (Transactions and Collections, American Antiquarian Society, 1911).
BRISSOT, J. P. *New Travels in the United States of America, Performed in 1788* (1792).
BRODHEAD, JOHN R. *History of the State of New York, 1609–1664* (2 vols., 1853, 1871).
BROWN, ALEXANDER. *Genesis of the United States* (2 vols., 1890, 1891).
BROWN, JOHN. *The Pilgrim Fathers of New England and their Puritan Successors* (4th ed., 1897).
BRUCE, P. A. *Economic History of Virginia in the Seventeenth Century* (2 vols., 1896, 1907).
——. *Institutional History of Virginia in the Seventeenth Century* (2 vols., 1910).
BURKE, EDMUND. *Works* (*Bohn's British Classics*, 8 vols., 1868–1873).

CALENDAR OF STATE PAPERS. *Colonial Series, America and West Indies*, 1574–1701 (vols. I–XIX, 1860–1910).
CANDLER, A. D. (ed.). *Colonial Records of Georgia, 1732–1774* (17 vols., 1904–1908).
CHALMERS, GEORGE. *Introduction to the History of the Revolt of the American Colonies*, etc. (2 vols., 1845).
——. *Political Annals of the Present United Colonies from their Settlement to the Peace of 1763* (1780).
CHAMPION, RICHARD. *Considerations on the Present Situation of Great Britain and the United States of America*, etc. (1784).
CHANNING, EDWARD. *A History of the United States* (vols. I–III, 1907–1912).
CHATTERTON, E. K. *Ships and Ways of Other Days* (1913).
CHEYNEY, EDWARD P. *European Background of American History* (vol. I of *The American Nation*, 1904).
COMMERCE. *The United States with Europe and the West Indies* (1783).
THE COMMERCE OF RHODE ISLAND. Vol. I (Massachusetts Historical Society Collections, 7th series, IX, 1914).
CONSIDERATIONS ON THE DISPUTE NOW BEFORE THE HOUSE OF COMMONS, *between the British Southern and Northern Plantations in America* (a letter, 1731).
CORNEWALL-JONES, R. J. *The British Merchant Service*, etc. (1898).
CRAIK, G. L. *The History of British Commerce, from the Earliest Times* (3 vols., 1844).

DAVIS, A. M. *Currency and Banking in the Province of Massachusetts Bay* (Publications American Economic Association, 3d series, I, No. 4, 1900).
DAVIS, JOHN P. *Corporations—A Study of the Origin of Great Combinations* (2 vols.; vol. II, chap. 6, "Colonial Companies," 1905).
DAVIS, WILLIAM M. *The International Geography* (edited by H. R. Mill; chap. XXXVII on "The Continent of North America," chap. XL, "The United States," 1899, 5th ed., 1912).
DAVIS, WILLIAM T. (ed.). *Bradford's History of Plymouth Plantation, 1606–1646* (1908).
DEFOE, DANIEL. *A Plan of English Commerce, Being a Complete Prospect of the Trade of this Nation* (1728; 2d ed., 1730).
DICKINSON, JOHN. *Letters from a Farmer in Pennsylvania to the Inhabitants of the British Colonies* (1769).
———. *Political Writings* (2 vols., 1801).
A DISCOURSE ON TRADE; MORE PARTICULARLY ON SUGAR AND TOBACCO (for J. Roberts, 1733).
DOYLE, J. A. *History of the English Colonies in America* (5 vols., 1882–1907).

EDWARDS, BRYAN. *The History, Civil and Commercial, of the British Colonies in the West Indies* (4 vols., 1806).
EGERTON, H. E. *A Short History of British Colonial Policy* (1897).
EVANS, CHARLES H. *Exports, Domestic and Foreign, from American Colonies to Great Britain, 1697–1789* (1884).

FARRAND, L. *Basis of American History* (vol. II of *The American Nation*, 1904).
FIELD, EDWARD. *The State of Rhode Island and Providence Plantations at the End of the Century* (3 vols., 1902).
FISHER, E. J. *New Jersey as a Royal Province, 1738–1776* (Columbia University Studies, XLI, 1911).
FISHER, G. P. *Colonial Era* (1892).
FISHER, S. G. *Pennsylvania, Colony and Commonwealth* (1897).
FISHER, W. C. *American Trade Regulations before 1789* (Papers American Historical Association, III, 1889).
FISKE, JOHN. *Old Virginia and her Neighbors* (2 vols., 1897).
FRANKLIN, BENJAMIN. *The Interest of Great Britain Considered with Regard to the Colonies* (1761).
FORCE, PETER. *Tracts and other Papers Relating Principally to the Colonies of North America* (4 vols., 1836–1846).
FRY, WILLIAM H. *New Hampshire as a Royal Province* (Columbia University Studies, XXIX, 1908).

GEE, JOSHUA. *The Trade and Navigation of Great Britain Considered* (1729).
A GENERAL TREATISE OF NAVAL TRADE AND COMMERCE (2 vols.; for E. Symon and J. Crokett, 1738).
GIESECKE, A. A. *American Commercial Legislation Before 1789* (Publications, University of Pennsylvania, 1910).
GRAY, L. C. *The Origin and Development of the Plantation System in the Colonial Period* (1913).
GREENE, E. B. *Provincial America, 1690–1740* (vol. VI of *The American Nation*, 1905).
GREENE, G. W. *A Short History of Rhode Island, 1631–1875* (1877).
GOODWIN, JOHN A. *The Pilgrim Republic* (edition of 1895).

HAKLUYT, RICHARD. *The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation* (12 vols., 1903–1905)
HALE, ENOCH. *Commerce of the United States* (*Hunt's Merchants' Magazine*, XXX–XXXIV).
HALL, C. C. (ed.). *Narratives of Early Maryland, 1633–1684* (1910).
HEWINS, W. A. S. *English Trade and Finance* (1892).
HOSMER, JAMES K. (ed.). *Winthrop's Journal* (2 vols., 1908).
HOWARD, GEORGE E. *Preliminaries of the Revolution* (vol. VIII of *The American Nation*, 1905).
HOWE, DANIEL W. *The Puritan Republic* (1899).

THE IMPORTANCE OF BRITISH PLANTATIONS (1731).

JAMESON, JAMES F. (ed.). *Narratives of New Netherlands, 1609–1664* (1909).
———. *William Usselinx* (Papers of American Historical Association, II, 1888).

JONES, B. B. *The Colonization of New England* (1904).
JONES, F. R. *The Colonization of the Middle States and Maryland* (1904).

KALM, PETER. *Travels into North America, 1748–49* (translated by J. R. Foster, 3 vols., 1770–1771).
KELLOGG, LOUISE P. "The American Colonial Charter," in *Annual Report of American Historical Association for 1903*, vol. I.

LEVI, LEONE. *The History of British Commerce, 1763–1878* (1880).
LINDSAY, W. S. *History of Merchant Shipping and Ancient Commerce* (4 vols., 1876).
LODGE, H. C. *A Short History of the English Colonies in America* (1881).

MCCLELLAN, WILLIAM S. *Smuggling in the American Colonies* (1912).
MACDONALD, WILLIAM (ed.). *Select Charters and other Documents Illustrative of American History, 1606–1775* (1899, 1904).
MCLAUGHLIN, ANDREW C. *The Confederation and the Constitution* (vol. X of *The American Nation*, 1905).
MACPHERSON, DAVID. *Annals of Commerce, Manufactures, Fisheries and Navigation* (4 vols., 1805).
MARKS, MARY A. M. *England and America, 1763–1783* (2 vols., 1907).
MEASE, JAMES. *Picture of Philadelphia* (an account of its origin, increase and improvements in arts, sciences, manufactures, commerce and revenue, 1811).
MERENESS, N. D. *Maryland as Proprietary Province* (1901).
MINES, S. L. *Colbert's West India Policy* (1912).
MOORE, J. R. H. *An Industrial History of the American People* (1913).
MORRISS, MARGARET SHOVE. *Colonial Trade of Maryland, 1689–1715* (1914).
MYERS, A. C. (ed.). *Narratives of Early Pennsylvania, West New Jersey and Delaware, 1630–1707* (1912).

O'CALLAGHAN, E. B. *Documentary History of the State of New York* (4 vols., 1849–51).
O'CALLAGHAN and FERNOW (eds.). *Documents Relative to the Colonial History of the State of New York* (15 vols., 1856–1887).
OPINIONS ON INTERESTING SUBJECTS OF PUBLIC LAW AND COMMERCIAL POLICY ARISING FROM AMERICAN INDEPENDENCE (1785).
OSGOOD, H. L. *The American Colonies in the Seventeenth Century* (3 vols., 1904–1907).
———. "The Colonial Corporation," in *Political Science Quarterly*, XI, 1896.
OSGOOD and BATCHELDER. *Historical Sketch of Salem.*

PAGE, T. N. *The Old Dominion, Her Making and Her Manners* (1908).
PAINE, R. D. *The Ships and Sailors of Old Salem* (1912).
PALFREY, JOHN G. *A Compendious History of New England from the Discovery by Europeans to the First General Congress of the Anglo-American Colonies* (4 vols., 1873).
PAULLIN and PAXSON. *Guide to the Materials in London Archives for the History of the United States since 1783* (Carnegie Inst. Wash. Pub. No. 90B, 1914).
PEABODY, R. E. *Merchant Venturers of Old Salem* (1913).
PEARSE, J. B. *A Concise History of the Iron Manufacture of the American Colonies up to the Revolution, and of Pennsylvania until the Present Time* (1876).
PHILLIPP, HENRY. *Historical Sketches of the Paper Currency of the American Colonies* (2 vols., 1865–66).
POSTLETHWAYT, MALACHY. *Britain's Commercial Interest Explained and Improved*, etc. (2 vols., 1747).
———. *The Universal Dictionary of Trade and Commerce*, etc. (1766).
POWELL, L. P. (ed.). *Historic Towns of New England* (1898).
POWNALL, THOMAS. *The Administration of the Colonies* (1764).
PURCHAS, SAMUEL. *Haklūytus Posthumus or Purchas His Pilgrimes* (20 vols., 1905–1907).

RIPLEY, W. Z. *Financial History of Virginia, 1609–1776* (Columbia University Studies, IV, No. 1, 1893).
ROOT, W. T. *The Relations of Pennsylvania with the British Government, 1696–1765* (Publications, University of Pennsylvania, 1912).

SALLEY, ALEXANDER S. (ed.). *Narratives of Early Carolina, 1650–1708* (1911).

SAUNDERS, W. S. (ed.). *Colonial Records of North Carolina, 1662–1776* (10 vols., 1866–1905).
SCOTT, W. R. *Constitution and Finances of English, Scotch and Irish Joint-Stock Companies in 1720* (3 vols., 1910–1912).
SELECT CHARTERS OF TRADING COMPANIES, 1530–1707 (1913).
SHEFFIELD, Lord JOHN. *Observations on the Commerce of the American States* (6th ed. 1784).
SKETCH OF THE RESOURCES OF THE CITY OF NEW YORK FROM THE FOUNDATION OF THE CITY TO THE DATE OF THE LATEST STATISTICAL ACCOUNTS (1827).
SMITH, Captain JOHN. *Works* (edited by Edward Arber, 1884).
SMITH, WILLIAM. *History of the First Discovery and Settlement of Virginia* (Sabin's reprint, 1865).
SOCIETY OF SHIPOWNERS OF GREAT BRITAIN. *Collection of Interesting and Important Reports and Papers on the Navigation and Trade of Great Britain*, etc. (1807).
SUMNER, WILLIAM G. *The Financier and the Finances of the American Revolution* (1891).

TANNER, E. P. *The Province of New Jersey, 1664–1738* (Columbia University Studies, XXX, 1908).
THWAITES, R. G. *The Colonies, 1492–1750* (Epochs of American History, rev. ed., 1897).
TRUMBULL, BENJAMIN. *A Complete History of Connecticut, 1630 to the Close of the Indian Wars* (2 vols., 1898).
TRUMBULL and HOADLY (compilers). *Public Records of the Colony of Connecticut* (15 vols., 1850–1890).
TYLER, L. G. *England in America* (vol. IV of *The American Nation*, 1904).
——— (ed.). *Narratives of Early Virginia, 1606–1625* (1907).

VAN TYNE, CLAUDE H. *The American Revolution* (vol. IX of *The American Nation*, 1905).

WEEDEN, WM. B. *Economic and Social History of New England* (2 vols., 1890–1891).
WESTERFIELD, R. B. *Commercial Organization in England, 1660–1760* (1913).
WHITWORTH, Sir CHARLES. *State of Trade of Great Britain in its Imports and Exports, Progressively from the Year 1697*, etc. (the tables in the copy in Library of Congress, Washington, are continued, in manuscript, from 1772 to 1801; 1776).
WOOD, W. *A Survey of Trade, together with Considerations on our Money and Bullion* (1718).

DOMESTIC TRADE.

ALLEN, THOMAS. *The Commerce and Navigation of the Valley of the Mississippi* (1847).
AMERICAN RAILROAD ENGINEER (1865).
THE AMERICAN RAILWAY. By various authors (1899).
ARMROYD, GEORGE. *A Connected View of the Whole Internal Navigation of the United States* (1826).

BENTON, E. J. *The Wabash Trade Route* (Johns Hopkins University Studies, XXI, 1903).
BIRKBECK, MORRIS. *Letters from Illinois* (1818).
———. *Notes on a Journey in America* (1817; 2d ed., 1818).
BISHOP, A. L. *The State Works of Pennsylvania* (1907).
BLOWE, DANIEL. *A Geographical, Historical, Commercial, and Agricultural View of the United States of America* (1820).
BRADBURY, JOHN. *Travels in the Interior of North America in the Years 1809, 1810, and 1811*, etc. (1817).
BROWN, WILLIAM H. *History of the First Locomotive in America* (1871).
BUCKINGHAM, J. S. *America: Historical, Statistical and Descriptive* (1841).
———. *Eastern and Western States* (1842).
———. *Slave States* (1842).

CHAPIN, WILLIAM. *A Complete Reference Gazetteer of the United States* (1839).
CHEVALIER, MICHEL. *Society, Manners and Politics in the United States, 1834–35* (1839).
CHITTENDEN, H. M. *American Fur Trade in the Far West* (3 vols., 1902).
CHRISTY, DAVID. *Cotton is King, or Slavery in the Light of Political Economy* (1860).
CLAY, HENRY. *Works* (ed. by Calvin Colton, 6 vols., 1863).
COLLINS, W. H. *The Domestic Slave Trade in the United States* (1904).
COMAN, KATHARINE. *The Economic Beginnings of the Far West* (1912).
COMMERCIAL AND FINANCIAL CHRONICLE (New York, 1865–).
COXE, TENCH. *Statement of the Arts and Manufactures of the United States* (1813).

DAVIES, BENJAMIN. *A New System of Modern Geography* (1805).
DAVIS, JOHN. *Travels of Four Years and a Half in the United States, 1798, 1802* (1802).
DE TOCQUEVILLE, ALEXIS CHARLES. *De la democratie en Amerique* (1836).
DICKENS, CHARLES. *American Notes* (1842).
DRAKE, CHARLES D. *Pioneer Life in Kentucky* (1870).
DWIGHT, TIMOTHY. *Travels in New England and New York, 1796–1815* (4 vols., 1821–1822).

FAUX, WILLIAM. *Memorable Days in America* (1823).
FERGUSON, WILLIAM. *America by River and Rail* (1856).
FISHER, RICHARD S. *The Progress of the United States of America from the Earliest Periods* (1854).
FLAGG, A. C. *Internal Improvements in New York* (in *Hunt's Merchants' Magazine*, XXIII–XXV, 1850–1851).
FLINT, HENRY M. *Railroads of the United States, their History and Statistics* (1868)
FLINT, TIMOTHY. *A Condensed Geography and History of the Western States* (1828).
———. *History and Geography of the Mississippi Valley* (2 vols., 2d ed., 1832).
———. *Recollections of the Last Ten Years, 1815–25* (1826).

GALLATIN, ALBERT. *Report on Internal Improvements* (American State Papers, Miscellaneous, I, 724.
GOUGE, WILLIAM M. *A Short History of Paper Money and Banking in the United States* (1833)
GREELEY, HORACE. *An Overland Journey from New York to San Francisco in the Summer of 1859* (1860).
GREENHOW, R. *History of Oregon and California* (1844).
GREGG, JOSIAH. *Commerce of the Prairies: The Journal of a Santa Fe Trader* (2 vols., 1845; also in Thwaites *Early Western Travels*, XIX, 155).

HALL, J. *Letters from the West* (1828).
———. *Notes on Western States* (1838).
———. *Ohio Navigation* (1821).
———. *Statistics of the West* (1836).
HARMON, DANIEL WILLIAMS. *A Journal of Voyages and Travels in the Interior of North America, 1800* (1904).
HAZARD, SAMUEL. *Hazard's Register of Pennsylvania* (16 vols., 1828–1835).
HEWETT, D. *The American Traveller* (1825).
HILL, H. W. *Historical Review of Waterways and Canal Construction in New York State* (Buffalo Historical Society Publications, 1908).
HOMANS, BENJAMIN. The United States Railroad Directory for 1856 (1856).
HULBERT, A. B. *Historic Highway Series* (15 vols., 1902–1905): vol. II, *Indian Thoroughfares;* vol. III, *Washington's Road; The First Chapter of the Old French War;* vol. VI, *Boone's Wilderness Road;* vol. VII, *Portage Paths; The Keys of the Continent;* vol. IX, *Waterways of Westward Expansion;* vol. X, *The Cumberland Road;* vols. XI, XII, *Pioneer Roads of America* (2 vols.); vols. XIII, XIV, *The Great American Canals* (2 vols.).

IMLAY, GILBERT. *A Topographical Description of the Western Territory of North America* (1792).
INGLE, EDWARD. *Southern Side-Lights* (1896).
INMAN, HENRY. *The Great Salt Lake Trail* (1898).
———. *The Old Santa Fe Trail* (1898).

JONES, ALEXANDER. *Historical Sketch of the Electric Telegraph* (1852).
JONES, CHESTER LLOYD. *The Economic History of the Anthracite Tidewater Canals* (Publications of the University of Pennsylvania, 1908).
JOURNAL OF COMMERCE AND COMMERCIAL BULLETIN (New York, 1827–).

KETTELL, T. P. *Southern Wealth and Northern Profits in Eighty Years' Progress* (1860).

LAMBERT, JOHN. *Travels through Lower Canada and the United States* (2 vols., 1814).
LARDNER, DIONYSIUS. *Railway Economy* (1850).
LAUT, AGNES C. *Pathfinders of the West* (1904).
LORD, DANIEL. *The Effect of Secession on the Commercial Relations Between the North and South* (Secession Pamphlets, VIII, 1861).

LYELL, SIR CHARLES. *Second Visit to the United States of North America, 1845–46* (2 vols., 1849)
———. *Travels in North America, 1841–42* (1845).

MACKAY, ALEXANDER. *The Western World* (1849).
MARTINEAU, HARRIET. *Society in America* (3 vols., 1837)
MICHAUX, F. A. *Travels to the Westward of the Alleghany Mountains* (1805).
MILLS, R. *Statistics of South Carolina* (1826).
MITCHELL, SAMUEL A. *Mitchell's Compendium of all the Internal Improvements of the United States* (1835).
MORRIS, C. N. *Internal Improvements in Ohio, 1825–50* (Papers American Historical Association, III, 1889, 349–380).
MORSE, JEDIDIAH. *The American Gazetteer* (1797).
MOULTON, H. G. *Waterways versus Railways* (1912).
MURRAY, HUGH. *The United States of America* (1844).

OGG, FREDERIC AUSTIN. *Opening of the Mississippi: A Struggle for Supremacy in the American Interior* (1904).
OLMSTED, F. L. *The Cotton Kingdom* (2 vols., 1861).
———. *A Journey in the Back Country* (1860).
———. *Journey through Texas* (1860).
———. *Seaboard Slave States* (1856).

PATTON, J. H. *Natural Resources of the United States* (1888).
PETO, Sir S. MORTON. *Resources and Prospects of America* (1866).
PHILLIPS, U. B. *History of Transportation in the Eastern Cotton Belt to 1860* (1908).
POOR, H. V. *Manual of Railroads* (annual, 1868–) .
———. *Sketch of the Rise and Progress of Internal Improvements* (in *Manual of Railroads for 1881*).
POSTEL, KARL. *Life in the New World* (translated by Hebbe and Mackay, 1844).
POUSSIN, G. T. *The United States: Its Power and Progress* (1851).

REPORT OF THE COMMITTEE OF THE NEW YORK CONVENTION OF THE FRIENDS OF DOMESTIC INDUSTRY (OCTOBER 26, 1831) ON COASTING TRADE AND INTERNAL COMMERCE.
RICHARDS, THOMAS ADDISON. *Appleton's Illustrated Hand-Book of American Travel* (1857).
RINGWALT, J. L. *Development of Transportation Systems in the United States* (1888).
ROOSEVELT, THEODORE. *Winning of the West* (4 vols., 1889–1896).

SANBORN, J. B. *Congressional Grants of Land in Aid of Railways* (Bulletin of the University of Wisconsin, No. 30, 1899).
SCHOOLCRAFT, HENRY R. *Narrative Journal of Travels through the Northwestern Regions of the United States* (1821).
———. *Travels in the Central Portion of the Mississippi Valley* (1825).
SEAMAN, EZRA CHAMPION. *Progress of Nations* (essays, 1846).
SMALLEY, E. V. *History of the Northern Pacific Railroad* (1883).
SMITH, JOHN CALVIN. *The Illustrated Hand-Book* (1846).
STIRLING, JAMES. *Letters from the Slave States* (1856).
STORROW, SAMUEL A. *Narrative of a Tour in the Summer of 1817 on Shores of Lake Superior and Other Northern Lakes of the United States* (1818).
STUART, JAMES. *Three Years in North America* (2 vols., 1833).

TANNER, H. S. *A Description of the Canals and Railroads in the United States* (1840).
———. *Recent Surveys and Internal Improvements in the United States* (1830).
———. *View of the Valley of the Mississippi* (1834).
THOMAS, DAVID. *Travels Through the Western Country in the Summer of 1816* (1819).
THOMPSON, J. G. *Rise and Decline of the Wheat-Growing Industry in Wisconsin* (1908).
THWAITES, R. G. (ed.). *Early Western Travels, 1748–1846* (32 vols., 1904–1907).
TROLLOPE, ANTHONY. *North America* (1862).
TUNELL, GEORGE G. *Report on Lake Commerce* (Department of Commerce and Labor, Bureau of Statistics, 1895).

TURNER, F. J. *The Significance of the Frontier in American History* (1894).
TWINING, THOMAS. *Travels in America One Hundred Years Ago, 1795–96* (1894).

UNITED STATES:
Department of the Interior—
Statement Showing Land Grants made by Congress to aid in the construction of Railroads, Wagon Roads, Canals and Internal Improvements (1888).
Department of the Treasury—
Bureau of Statistics—
"Internal Commerce" in *Monthly Summary of Commerce and Finance*, March 1901.
Department of War—
Report of the Chief of Engineers (annual, 1823–1861, 1864–).
Interstate Commerce Commission—
Reports (annual, 1887–).
Statistics of Railways (annual, 1888–).

VAN HISE, C. R. *The Conservation of Natural Resources in the United States* (1910).
VERHOEFF, MARY. *The Kentucky Mountains Transportation and Commerce, 1750–1911* (1911).

WARD, G. W. *The Early Development of the Chesapeake and Ohio Canal Project* (Johns Hopkins University Studies, XVII, 1899).
WEAVER, C. C. *History of Internal Improvements in North Carolina Previous to 1860* (Johns Hopkins University Studies, XXI, 1903).
WELBY, ADLARD. *A Visit to North America and the English Settlements in Illinois* (1821).
WELD, CHARLES R. *A Vacation Tour in the United States and Canada* (1855).
WELD, ISAAC, JR. *Travels Through the States of North America . . . 1795, 1796 and 1797* (1799)
WHITE, H. K. *History of the Union Pacific Railroad* (1895).
WHITNEY, ASA. *Project for a Railroad to the Pacific* (1849).
WINSOR, JUSTIN. *The Westward Movement, 1763–1798* (1897).
WINTERBOTHAM, WILLIAM. *An Historical, Geographical, Commercial, and Philosophical View of the American United States* (1795).
WOODS, JOHN. *Two Years' Residence in the Settlement on the English Prairie in the Illinois Country* (1822).

THE FOREIGN TRADE, 1789–1914.

ADAMS, BROOKS. *Meaning of the Recent Expansion of the Foreign Trade of the United States* (1902).
AMERICAN STATE PAPERS. *Commerce and Navigation*, vol. II (1834).
ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE: *Tariffs, Reciprocity and Foreign Trade* (May 1907). *Latin America* (June 1911). *China* (Jan. 1912). *Canadian National Problems* (Jan. 1913).
ASHLEY, W. J. *British Industries* (1903).

BAINE, EDWARD. *History of the Cotton Manufacture in Great Britain* (1835).
BAKER, JOHN MARTIN. *A View of the Commerce between the United States and Rio de Janeiro* (1838).
———. *A View of the Commerce of the United States and the Mediterranean Seaports, Including the Adriatic and Morea* (1847).
BANCROFT, H. H. *The New Pacific* (rev. ed., 1912).
BARKER, J. E. *Modern Germany, Her Political and Economic Problems* (2d ed., 1907).
BASTABLE, C. F. *The Theory of International Trade* (4th ed., 1903).
BATES, WILLIAM B. *The American Marine* (2d ed., 1897).
———. *American Navigation* (1902).
BOARD OF TRADE (GREAT BRITAIN). *American Competition in Iron and Steel Trade* (*Board of Trade Journal*, XLI, 163, 1903).
———. *The Board of Trade Journal* (weekly, 1881–).
BOLCE, HAROLD. *The New Internationalism* (1907).
BRISSOT, J. P. *The Commerce of America with Europe, Particularly with France and Great Britain* (1795).
BROWNE, G. WALDO (ed.). *The New Far East and the New America* (6 vols., 1901).

BUCHANAN, ISAAC. *The Relation of the Industry of Canada with the Mother Country and the United States* (1864).
BUREAU OF AMERICAN REPUBLICS (changed to International Bureau of American Republics and later to the Pan American Union), *Bulletins* (1891–1908); *Monthly Bulletin* (1894).
BURNLEY, JAMES. *The Story of British Trade and Industry* (1904).

CANADA, Department of Agriculture. *The Statistical Year Book of Canada* (annual, 1885–).
CHAPMAN, JOHN. *The Cotton and Commerce of India* (1851).
CHAPMAN, J. H. *The Woolen and Worsted Industries* (1907).
CHAPMAN, SYDNEY J. *The History of Trade Between the United Kingdom and the United States* (1899).
———. *The Lancashire Cotton Industry* (1904).
CHARLES, GARFIELD (compiler). *Treaties, Conventions*, etc., *between the United States of America and other Powers, 1910–1913* (Sen. Doc. No. 1063, 62 Cong., 3 sess., 1913. A supplement (vol. III) to Malloy, *Treaties, Conventions*, etc., Sen. Doc. No. 357, 61 Cong., 2 sess., 2 vols., 1910).
CHATTERTON, E. KEBLE. *Steamships and Their Story* (1910).
CLARK, A. H. *The Clipper Ship Era, 1843–1869* (1911).
CLARK, W. J. *Commercial Cuba* (1898).
COMMITTEE OF LORDS OF PRIVY COUNCIL. *The Trade of Great Britain with the United States* (Jan. 1791; reprinted by U. S. Department of State, 1888).
CONANT, C. A. *The United States in the Orient* (1900).
COOLIDGE, A. C. *The United States as a World Power* (1908).
CORTELYOU, G. B. "Some Agencies for Extension of our Domestic and Foreign Trade," in *Annals of the American Academy of Political and Social Science*, XXIV, July 1904.
CORWIN, THOMAS. *Report on the Trade and Commerce of the British North American Colonies with the United States and other Countries, 1829–1850* (Sen. Exec. Doc. No. 23, 31 Cong., 2 sess., 1851).
CRAIK, G. L. *The History of British Commerce—From the Earliest Time* (3 vols., 1844).
CRITCHELL and RAYMOND. *A History of the Frozen Meat Trade* (1912).
CROIL, JAMES. *Steam Navigation and its Relation to the Commerce of Canada* (1898).
CROOKES, Sir WILLIAM. *The Wheat Problem; with Chapters on Future Wheat Supply of the United States*, by C. W. Davis and John Hyde (1899).
CUNNINGHAM, W. *The Growth of English Industry and Commerce in Modern Times* (4th ed., 2 vols., 1905–1907).
CURTIS, W. E. *Trade and Transportation Between the United States and Spanish America* (1889).

DEBOW, J. D. B. *The Progress of American Commerce* (*DeBow's Commercial Review*, II, 1846).
DEHN, R. M. R. *The German Cotton Industry* (1913).
DUES AND PORT CHARGES ON SHIPPING THROUGHOUT THE WORLD (3 vols., 1914).
DUMONT, H. D. *Report on Cuba to the Merchants' Association of New York* (2d ed., 1903).
DUNMORE, W. T. *Ship Subsidies* (1907).

ELLISON, THOMAS. *The Cotton Trade of Great Britain* (1886).
EDGE, F. M. *The Destruction of the American Carrying Trade* (1863; 2d ed., 1864).
EMORY, FREDERIC. "Causes of our Failure to Develop South American Trade," in *Annals of American Academy of Political and Social Science*, XXII, July 1903.
EVANS, CHARLES H. (compiler). *Exports, Domestic, from the United States to all Countries, 1789–1883 Inclusive* (1884).
———. *Imports—Duties, from* 1867–1883 (1884).
EXPORTERS AND IMPORTERS JOURNAL (monthly, 1892–).

FEARSON, HENRY B. *Sketch of America* (London, 1818).
FISK, G. M. *International Commercial Policies* (1910).
FLETCHER, R. A. *Steamships. The Story of their Development to the Present Day* (1910).
FOSTER, J. W. *American Diplomacy in the Orient* (1903).
FREEMAN and CHANDLER. *The World's Commercial Products* (1908).

GEERLIGS, H. C. P. *The World's Cane Sugar Industry—Past and Present* (1912).
GIBBINS, H. DE B. *British Commerce and Colonies* (3d ed., 1899).

Gibbins, H. De B. *Economic and Industrial Progress of the Century* (1903).
Great Britain. *Statistical Abstract for the United Kingdom* (annual, 1852–).
Griffin, A. P. C. *A List of Books*, etc., *on Mercantile Marine and Subsidies* (Library of Congress, 1903, 1906).
———. *List of Books*, etc., *on Reciprocity with Canada* (Library of Congress, 1907).
———. *List of Works on the Tariffs of Foreign Countries* (Library of Congress, 1906).
Griffin and Meyer. *List of References on Reciprocity* (Library of Congress, 1910).
Griffis, W. E. *America in the Far East* (1900)

Hale, A. *The South Americans—The Story of the South American Republics*, etc. (1907).
Hertslet's Commercial Treaties of Great Britain (periodically, 1820–1913).
Hill, Charles S. *History of American Shipping, its Prestige, Decline and Prospect* (1883).
Hobson, John A. *International Trade* (1904).
Holmes, Isaac. *An Account of the United States of America* (about 1823).
Homans, J. Smith, Jr. *An Historical and Statistical Account of the Foreign Commerce of the United States, 1820–1856* (1857).
Hopkins, J. C. *Progress of Canada in the Century* (1902.)
Hough, B. O. *Elementary Lessons in Exporting* (1909).
Huebner, G. G. "Tariff Provisions for Promotion of Foreign Trade of the United States," in *Annals of American Academy of Political and Social Science*, xxix, May 1907.

International Bureau of American Republics:
Argentina (1903).
Bolivia (1904).
The United States of Brazil (1901).
International Rubber Congress (edited by Torrey and Manders), *The Rubber Industry* (1911).

Jeans, J. S. *The Iron Trade of Great Britain* (1906).
——— (ed.). *Reports on American Industrial Conditions and Competition, by the Commissioners appointed by the British Iron Trade Association* (1902).
Johnson, Emory R. *Ocean and Inland Water Transportation* (1906).
———. *Panama Canal Traffic and Tolls* (1912).

Keiler, Hans. *American Shipping, Its History and Economic Conditions* (1913).
Kerbey, J. O. *An American Consul in Amazonia* (1911).
Kitchell, J. G. *American Supremacy: Being a Compilation of Facts and Statistics Regarding Foreign Commerce* (1901).

Laughlin and Willis. *Reciprocity* (1903).
Laut, Agnes C. *The Conquest of the Great Northwest—The Hudson Bay Company* (2 vols., 1908).
Lindsay, W. S. *History of Merchant Shipping and Ancient Commerce* (4 vols., 1876).
Lloyd's Register of British and Foreign Shipping (annual, 1834–).

MacGregor, John. *The Commercial and Financial Legislation of Europe and America* (1841).
McKenzie, F. A. *The American Invaders*, etc. (1901).
Mahan, A. T. *From Sail to Steam* (1907).
Malloy, Wm. M. (compiler). *Treaties, Conventions*, etc., *between the United States of America and other Powers, 1776–1909* (Sen. Doc. No. 357, 61 Cong., 2 sess., 2 vols., 1910).
Meeker, Royal. *History of Shipping Subsidies* (American Economic Association Publications, 3d Series, vi, No. 3, 1905).
A Merchant of Philadelphia. *Spanish America and the United States, or News of the Actual Commerce of the United States with the Spanish Colonies* (1818).
Meyer, H. B. *Additional References Relating to Mercantile Marine Subsidies* (Library of Congress, 1911).
———. *Additional References Relating to Reciprocity with Canada* (Library of Congress, 1911).
Morse, H. B. *The International Relations of the Chinese Empire, 1834–1860* (1910).

Nelson, Ernesto. "Argentine Commerce with the United States and Europe," in *Annals of American Academy of Political and Social Science*, xxii, July 1903.
North, S. N. D. "The Tariff and the Export Trade of the United States," in *Annals of American Academy of Political and Social Science*, xxiii, Jan. 1904.

ODDY, J. J. *European Commerce* (2 vols., 1805).
OGG, FREDERICK A. "Railroad Rates and the Flow of Our Foreign Trade," in *Review of Reviews*, April 1906.
OSBORNE, J. B. "Reciprocity in the American Tariff System," in *Annals of American Academy of Political and Social Science*, XXIII, Jan. 1904.

PAISH, GEORGE. *The Trade Balance of the United States* (Publications of National Monetary Commission, Sen. Doc. No. 579, 61 Cong., 2 sess., 1910).
PHILADELPHIA COMMERCIAL MUSEUM. *Foreign Commercial Guide—South America* (1906).
———. *World's Commerce and American Industries* (1903).
———. *Commerce of the World in 1910* (1911).
———. *World's Commerce and the United States' Share of It* (1899)
PHILIP, GEORGE. *Philip's Chamber of Commerce Atlas* (1912).
PHILIP, GEORGE, and SON. *The Merchant Shippers' and Ocean Travellers' Atlas* (1902)
PIGEON, A. C. *Protective and Preferential Import Duties* (1906).

RABBENO, U. *The American Commercial Policy* (1895).
RITTER, ABRAHAM. *Philadelphia and Her Merchants as Constituted Fifty to Seventy Years Ago* (1860).
ROMERO, MATIAS. *Mexico and the United States* (1898).
ROOT, J. W. *The Trade Relations of the British Empire* (1903).
RUTTER, F. R. *The South American Trade of Baltimore* (Johns Hopkins University Studies, XV, No. 9, Sept. 1897).
RUTTER, W. P. *Wheat Growing in Canada, the United States and the Argentine* (1911).

SANFORD, NATHAN. *A Report on Commerce, 1789 to 1819, made to the Senate, December 20, 1819* (*Niles' Register*, XIX, 1820).
SMITH, J. RUSSELL. *The Organization of Ocean Commerce* (Publications, University of Pennsylvania, 1905).
———. "Western South America and its Relations to American Trade," in *Annals of American Academy of Political and Social Science*, XVIII, Nov. 1901.
SOCIETY OF SHIPOWNERS OF GREAT BRITAIN. *Collection of Interesting and Important Reports and Papers on the Navigation and Trade of Great Britain*, etc. (1807).
SOLEY, J. R. *The Maritime Industries of America* (in Shaler's *The United States of America*, ed. of 1897).
THE STATIST (weekly, 1878–).
STERNS, W. P. "The Foreign Trade of the United States, 1820–1840" (in *Journal of Political Economy*, VIII, Dec. 1899).
STEVENS, F S. Speech in House of Representatives on Panama Canal Tolls (*Congressional Record*, 63 Cong., 2 sess., 6664–6689, April 6, 1914).

TAYLOR, R. C. *Statistics of Coal—Production, Consumption and Commercial Distribution in all Parts of the World* (revised by S. S. Halderman in 1845, 1848).
THE TEA AND COFFEE TRADE JOURNAL (monthly, 1901–).
THURBER, F. B. *Coffee—From Plantation to Cup* (1883).
TOMPKINS, D. A. *American Commerce, Its Expansion* (a collection of addresses and pamphlets relating to the extension of foreign markets for American manufactures, 1900).

UNITED STATES:
Department of Agriculture—
Section of Foreign Markets (established 1894; became Division of Foreign Markets, July 1, 1902; placed under Bureau of Statistics, Department of Agriculture, July 1, 1903)—
Annual Reports (1897–1903).
Bulletins.
Department of Commerce—
Bureau of Foreign and Domestic Commerce (in Department of Commerce and Labor, 1912–1913)—

UNITED STATES—Continued.

Department of Commerce—Continued.

Daily Consular and Trade Reports (daily except Sundays and holidays, Jan. 1, 1898, to Feb. 28, 1910; July 5, 1910– . Published as *Advance Sheets of Consular Reports*, Jan. 1, 1898, to Aug. 19, 1903; as *Daily Consular Reports*, Aug. 20, 1903, to July 17, 1905. Issued by Bureau of Foreign Commerce, Department of State, Jan. 1, 1898, to June 30, 1903; by Bureau of Statistics, Department of Commerce and Labor, July 1, 1903, to June 30, 1905; by Bureau of Manufactures, July 1, 1905, to 1912).

Monthly Summary of Commerce and Finance. For history, *see* United States, Department of Commerce, 369. Titles as indicated in the following issues:

American Commerce, 1821–1898 (June, 1899).

British West Indies and Other Possessions in America South of the United States (May 1899).

Commerce of Asia and Oceania, 1821–1898 (Nov. 1898).

Commerce of Mexico, Central and South America, and the West Indies, with Share of the United States and other Leading Nations therein, 1821–1900 (Aug. 1901).

Commerce of Spain in 1898 (Apr. 1899).

Commercial Africa in 1899 (Aug. 1899).

Commercial Africa in 1901 (Apr. 1902).

Commercial Australia in 1900 (Nov. 1901).

Commercial China in 1899 (Dec. 1899).

Commercial China in 1900 (June 1901).

Commercial China in 1904 (Jan. 1904).

Commercial Cuba in 1905 (May 1905).

Commercial India in 1902 (Dec. 1902).

Commercial Japan in 1899 (July 1899).

Commercial Japan in 1900 (Dec. 1901).

The Danish West Indies (Jan. 1902).

Diplomatic and Consular Service of the United States (Sept. 1903).

Exports of Domestic Manufactures and Imports of Manufacturers' Materials (May 1903).

Exports of Manufactures, 1889–1898 (May 1899).

Exports of Manufactures from the United States and their Distribution by Articles and Countries, 1790–1902 (April 1903).

Great Canals of the World (Dec. 1901).

Merchandise Declared for Export to the United States from each Consular District in Foreign Countries (Dec. 1903).

Reciprocity Treaties and Agreements (Sept. 1901).

The Russian Empire (April 1899).

The World's Production and Consumption of Coffee, Tea, Cocoa, and Yerba Mate (July 1905).

Department of Commerce and Labor (divided by act of March 4, 1913, into Department of Commerce and Department of Labor)—

Bureau of Manufactures (organized 1905, combined with Bureau of Statistics 1912, to form Bureau of Foreign and Domestic Commerce)—

Commercial Relations (annual, 1855–1911. By Bureau of Foreign Commerce, Department of State, 1855–1902; by Bureau of Statistics, Department of Commerce and Labor, 1903).

Monthly Consular and Trade Reports (monthly, 1880–1910. Issued by Bureau of Foreign Commerce, Department of State, 1880–1903; by Bureau of Statistics, Department of Commerce and Labor, 1903–1905. Discontinued since June 1910).

Report by Lincoln Hutchinson on Trade Conditions in Argentina, Paraguay and Uruguay (1906).

Report on Trade Conditions in Colombia (1907).

UNITED STATES—Continued.
Department of Commerce and Labor, etc.—Continued.
Bureau of Statistics (formed July 1903, by consolidation of Bureau of Foreign Commerce of Department of State and Bureau of Statistics of Department of the Treasury; consolidated, 1912, with Bureau of Manufactures to form Bureau of Foreign and Domestic Commerce)—
Analysis of the Foreign Trade of the United States, 1895–1905 (1906).
Commercial America in 1907 (1908).
The Commercial Orient in 1905 (1906).
Exports of Manufactures from the United States and their Distribution by Articles and Countries, 1800–1906 (1907).
Department of the Interior—
Census Office (now Bureau of the Census in Department of Commerce)—*History and Present Condition of New Orleans* (1881).
Department of the Navy—
Naval Intelligence Office. *Ports of the World: Their Coaling, Docking and Repairing Facilities* (1909).
Department of State—
Secretary—
Digest of Existing Commercial Regulations with Foreign Countries (3 vols., 1835–36).
Commercial Regulations of Foreign Countries with which the United States have Commercial Intercourse (1819).
Bureau of Foreign Commerce (Statistical Office, 1854–1874; Bureau of Statistics, 1874–1897)—*Report on Commercial Relations of United States with all Foreign Nations* (4 vols., 1855).

VANDERLIP, FRANK A. *The "American Commercial Invasion" of Europe* (1902).
VIGNES, EMMANUEL. *Repertoire General du Commerce National et International—Etats-Unis-France* (1902).

WARBURG, PAUL M. *The Discount System in Europe* (Publications National Monetary Commission, 1910).
WATSON, N. L. *The Argentine as a Market* (1908).
WELLS, DAVID A. *Our Merchant Marine* (1887).
WHELPLEY, JAMES D. *The Trade of the World* (1913).
WILLIAMS, M. *Position of the Cotton Trade, 1861–1863* (1863).
WILLIS, H. P. Reciprocity with Cuba, in *Annals of American Academy of Political and Social Science*, XXII, July 1903.
WILLMAN, R. *China as Open Door* (1900).
WILLSON, BECKLES. *The Great Company—A History of the Honourable Company of Merchant Adventurers Trading Into Hudson's Bay* (2 vols., 1900).

YEATS, JOHN. *Manual of Commerce* (4 vols.); vol. III, *Growth and Vicissitudes of Commerce in All Ages*, etc. (1887).

TRADE WITH NON-CONTIGUOUS POSSESSIONS.

ALASKA, GOVERNOR OF. *Annual Report* (1884–).
ALASKA RAILROAD COMMISSION. *Railway Routes in Alaska* (1913).
ALEXANDER, W. D. *Relation Between the Hawaiian Islands and Spanish America in Early Times* (Papers of the Hawaiian Historical Society, No. 1, 1892).
ATKINSON, F. W. *The Philippine Islands* (1905).
AUSTIN, O. P. "Our Trade with Hawaii and Porto Rico," in *Annals of American Academy of Political and Social Science*, XIX, May 1902.
———. "Problems of the Pacific" (*Monthly Summary of Commerce and Finance*, Aug. 1902).

BANCROFT, H. H. *History of Alaska* (vol. XXVIII, *History of Pacific States*, 1886).
BEALL, M. E., P. LACOSTE, CHAS. H. ALLEN, etc. *Opportunities in the Colonies and Cuba* (1902).
BLACKMAN, W F. *The Making of Hawaii* (1899).
BLAIR and ROBERTSON. *The Philippine Islands, 1493–1898* (55 vols., 1903–1909).
BROWNE, G. WALDO. *The Pearl of the Orient—The Philippine Islands* (1900).

CARPENTER, E. J. *America in Hawaii—A History of United States' Influence in the Hawaiian Islands* (1899).
CARROLL, H. C. *The Island of Porto Rico, Its Population, Commerce, Industries*, etc. (U. S. Treasury Department, 1899).
COLQUHOUN, A. R. *The Mastery of the Pacific* (1902).

DAVIS, G. W. *Reports on the Industrial and Economic Conditions of Puerto Rico* (1900).
DE MORGA, ANTONIO. *History of Philippine Islands, from the Discovery by Magellan in 1521 to Beginning of the 17th Century* (translated by Blair and Robertson, 2 vols., 1907).
DINWIDDIE, WILLIAM. *Puerto Rico, Its Conditions and Possibilities* (1899).

FORBES-LINDSAY, C. H. *American Insular Possessions* (2 vols., 1906)
FOREMAN, J. *The Philippine Islands* (3d ed., 1906).

GRIFFIN, A. P. C. *List of Books*, etc., *on Porto Rico* (Library of Congress, 1901).
———. *List of Books*, etc., *on the Philippine Islands* (Library of Congress, 1903).
———. *List of Books*, etc., *on Samoa and Guam* (Library of Congress, 1901).

HARRIMAN ALASKA EXPEDITION. *Alaska* (2 vols., 1901).

IRELAND, ALLEYNE. *The Far Eastern Tropics* (1905).

JARVIS, J. J. *History of the Hawaiian Islands* (1872).

MCKINLEY, A. E. *Island Possessions of the United States* (1907).

PHILADELPHIA COMMERCIAL MUSEUM. *The Philippine Islands* (1902).
PHILIPPINE COMMISSION. *Annual Report* (1899–).
PLEHN, CARL C. "Tariff Relations of the United States and the Philippine Islands," in *Annals of the American Academy of Political and Social Science*, xxiii, Jan. 1904.
PORTO RICO, GOVERNOR OF. *Annual Report* (1900–).

ROBERTSON, J. A. *Bibliography of the Philippine Islands* (1908).

SAWYER, F. H. *The Inhabitants of the Philippines* (1900).
SCHAFER, JOSEPH. *The Pacific Slope and Alaska* (1904).

TAFT, WILLIAM H. *Special Report to the President on the Philippines* (1908).
THRUM, THOMAS G. *Hawaiian Almanac and Annual* (1884).

UNITED STATES:
Department of Agriculture—
Division of Foreign Markets—
Trade of the Philippine Islands (Bulletin No. 14, 1898).
The Trade of Porto Rico (Bulletin No. 13, 1898).
Department of Commerce—
Bureau of Foreign and Domestic Commerce—
Monthly Summary of Commerce and Finance (for history, *see* United States, Department of Commerce, p. 368). The following issues, under titles indicated:
Foreign Commerce of Cuba, Porto Rico, Hawaii, the Philippines and Samoan Islands (Feb. 1899).
Cuba, Porto Rico, Hawaiian, Philippine and Samoan Islands, Their Commerce with the United States and other Countries, etc. (Nov. 1899).
Porto Rico, Hawaii, the Philippine Islands, Guam and Samoan Islands and Cuba (July 1901).
Commercial Alaska (July 1903).
Census Office (under Secretary of State, 1800–1849; in Department of the Interior, 1849–1903; transferred to Department of Commerce and Labor under name of Bureau of the Census, 1903; in Department of Commerce since 1913).
Population and Resources of Alaska, 1890 (1893).
Census of the Philippine Islands, 1903 (4 vols., 1905).

UNITED STATES—Continued.
Department of Commerce and Labor (divided by act of March 4, 1913, into Department of Commerce and Department of Labor)—
Bureau of Statistics—
Commercial Philippines in 1906 (1907).
Commercial Porto Rico in 1906 (1907).
Department of War—
Bureau of Insular Affairs (Division of Customs and Insular Affairs, 1898–1900; Division of Insular Affairs, Dec. 10, 1900, to July 1, 1902).
Annual Report to Secretary of War (1903–1913).
Foreign Commerce of the Philippine Islands, 1909–1911 (1912).
Monthly Summary of Commerce of the Philippine Islands (monthly, 1900–1905; changed to quarterly, 1906–1910).
Monthly Summary of Commerce of Porto Rico (monthly, 1900–1902).
Official Handbook: Description of the Philippines (1903).

VAN MIDDELDYK, R. A. The *History of Puerto Rico* (1903).
VIVIAN and SMITH. *Everything about our new Possessions* (1899).

WHITNEY, CASPAR. *Hawaiian America, Its History, Resources and Prospects* (1899).
WORCESTER, D. C. *The Philippine Islands and Their People* (1899).
———. *Philippines, Past and Present* (2 vols., 1914).

FISHERIES.

ATWATER, W. C. *American Fisheries, Menhaden* (1880).

BAIRD, SPENCER F. *Sea Fisheries of Eastern North America* (Report of U. S. Fish Commission, 1886).
BABSON, JOHN J. *History of Gloucester* (1860).
BOSTON FISH BUREAU. *Annual Report* (1875–).

CALCULATION OF THE STATE OF THE COD AND WHALE FISHERY BELONGING IN MASSACHUSETTS IN 1763 (Massachusetts Historical Society Collections, VIII, 202–203, 1764).
COLLINS, J. W. *Statistical Review of the Coast Fisheries of the United States* (Report, U. S. Fish Commission, 1888).
COLLINS and SMITH. *Report on the Fisheries of the New England States* (Bulletin of U. S. Fish Commission, XIX, 241, 1899).

DAVIDSON, HUNTER. *Report on the Oyster Resources of Maryland* (1870).

ELLIOTT, CHARLES B. *The United States and the Northeastern Fisheries* (1887).
ELLIOTT, H. W. *A Monograph of the Seal Islands of Alaska* (1882).

THE FISHING GAZETTE (1885–).

GOODE, GEORGE BROWN. *A Review of the Fishing Industry of the United States and the Work of the United States Fish Commission* (1884).
GOODE, GEORGE BROWN, and others. *The Fisheries and Fishery Industries of the United States* (7 vols. in 5 sections, 1884–1887; section I, *Natural History of Useful Aquatic Animals;* section II, *A Geographical Review of the Fisheries Industries and Fishing Communities for the Year 1880;* section III, *The Fishing Grounds of North America, with forty-nine charts;* section IV, *The Fishermen of the United States;* section V, *History and Methods of the Fisheries*).

JORDAN, D. S., and others. Fur Seal and Fur-Seal Islands of the North Pacific Ocean (5 parts, 1898–1899).

KELLOGG, J. L. *Clam and Scallop Industries of New York State* (Bulletin of the New York State Museum, 1901).

McDonald, M. *Salmon Fisheries of the Columbia River* (1894).
McFarland, Raymond. *A History of the New England Fisheries* (Publications, University of Pennsylvania, 1911).

Oyster Trade of the Chesapeake (*DeBow's Commercial Review*, 1858).

Sabine, Lorenzo. *Report on the Principal Fisheries of the American Seas* (1853; also in Exec. Doc. No. 23, 32 Cong., 2 sess., and in House Misc. Doc. No. 32, 42 Cong., 2 sess.).
Scammon, C. M. *The Marine Mammals of the Northwest Coast of North America, with an Account of the American Whale Fishery* (1874).
Snow, F. *Treaties and Topics in American Diplomacy* (1894).
Starbuck, Alexander. *History of the American Whale Fishery from its Earliest Inception to the Year 1876* (1878).

Tingle, G. R. *Report on the Salmon Fisheries of Alaska* (1897).
Tower, W. S. *A History of the American Whale Fishery* (Publications, University of Pennsylvania, 1907).

United States:
Department of Commerce—
Bureau of the Census. *Fisheries of the United States, 1908* (1911).
Bureau of Fisheries (in Department of Commerce and Labor, 1903–1913; previous to 1903, the U. S. Fish Commission, an independent government office, established by joint resolution of Congress, Feb. 9, 1871)—
Bulletins (annual, 1881–).
Reports (annual, 1871–).
Department of State—
Proceedings of Tribunal of Arbitration . . . for Determination of Rights of United States in the Bering Sea (Sen. Exec. Doc. No. 177, 53 Cong., 2 sess., 16 vols., 1895).
Proceedings in the North Atlantic Coast Fisheries Arbitration before the Permanent Court of Arbitration at The Hague (Sen. Doc. No. 870, 61 Cong., 3 sess., 12 vols., 1912).

Whalemen's Shipping List and Merchants Transcript (a trade journal, 1843–).

GOVERNMENT AID AND COMMERCIAL POLICY.

American State Papers (vol. xiv, *Naval Affairs*).
Annals of the American Academy of Political and Social Science. *American Waterways*. (Various articles and addresses on waterways by J. A. Fairlie, C. L. Jones, F. G. Newlands, Gifford Pinchot, J. E. Ransdell, Theodore Roosevelt, George C. Sikes, *et al.*, xxxi, No. 1, Jan. 1908).

Bates, William W. *American Navigation: The Political History of its Rise and Ruin and the Proper Means for its Encouragement* (1902).
Bennett, F. M. *The Steam Navy of the United States* (2 vols., 1897).
Bixby, William H. "River and Harbor Improvements under the Corps of Engineers, U. S. Army," in *Proceedings National Rivers and Harbors Congress, 1909*, 1910.
Burton, Theodore E. "Improving our Rivers and Harbors," in *The Independent*, lxx, 384, 1911).
Byall, J. B. "The American System of Improving and Administering Commercial Facilities," in *Annals of American Academy of Political and Social Science*, xxiv, 1904, pp. 489–506).

Cooley, Lyman E. *The Diversion of the Waters of the Great Lakes by way of the Sanitary and Ship Canal of Chicago* (1913).
Cooper, J. Fenimore. *History of the Navy of the United States of America* (1854).

CROWELL, J. F. "The Shipping Industry of the United States and its Relation to the Foreign Trade," in *Monthly Summary of Commerce and Finance*, Dec. 1900, pp. 1373–1411.

ENDICOTT, WILLIAM C., JR. (compiler). *Immigration Laws of the United States* (1887).

FAIRLIE, J. A. *National Administration of the United States of America* (1905).

GRIFFIN, A. P. C. *List of References on the U. S. Consular Service, with Appendix on Consular Systems in Foreign Countries* (Library of Congress, 1905).

HARTS, W. W. "Some Desirable Governmental Policies for River Improvements," in *Bulletin American Economic Association*, 4th series, No. 2, 154, April 1911).
HEPBURN, A. B. *Artificial Waterways and Commercial Development* (1909).
HUNT, GAILLARD. *History of the Department of State* (1893).

ILLINOIS CANAL COMMISSIONERS. *Annual Reports* (1912–1913).
INGRAM, AUGUSTUS E. *Digest of Circular Instructions to Consular Officers* (Department of State, 1908).

JOHNSON, EMORY R. "The Early History of the United States Consular Service, 1776–1792," in *Political Science Quarterly*, XIII, March 1898, p. 19.
———. Inland Waterway Policy, in *Bulletin American Economic Association*, 4th series, No. 2, 166, April 1911.
———. . *Inland Waterways: Their Relation to Transportation* (1893).
———. "River and Harbor Bills," in *Annals of American Academy of Political and Social Science*, II, May 1892, pp. 782–812.
JOHNSTON, ALEXANDER. Internal Improvements, in *Cyclopedia of Political Science, Political Economy, and of the Political History of the United States* (J. J. Lalor, ed.), II, 573, 1883.
JONES, CHESTER LLOYD. *The Consular Service of the United States: Its History and Activities* (Publications, University of Pennsylvania, 1906).
JONES, EVAN R. (ed.). *The Shipping World Year-Book* (annual, 1902–).

KAPP, FRIEDRICH. *Immigration and the Commissioners of Emigration of the State of New York* (1870).
KERR and MOLL. *Organization, Powers and Duties of Health Authorities* (U. S. Public Health Bulletin No. 54, 1912).

MOXEY, EDWIN. Federal Quarantine Laws, in *Political Science Quarterly*, XXIII, 617, Dec. 1908.

NATIONAL RIVERS AND HARBORS CONGRESS. *Proceedings* (annual, 1901–).
NEW YORK BARGE CANAL TERMINAL COMMISSION. *Report and Proceedings* (2 vols., 1911).
NEW YORK (STATE) COMMISSION OF IMMIGRATION. *Report* (1909).
———. COMMISSIONERS OF QUARANTINE. *Annual Reports* (1898, 1899, 1901).
NEW YORK SUPERINTENDENT OF PUBLIC WORKS. *Annual Report on the Canals of the State* (1913).

PORT ADMINISTRATION AND HARBOR FACILITIES: A SYMPOSIUM, in *Annals of American Academy of Political and Social Science*, XXIX, 357–386, 1907.
POWELL, BURT E. "Jefferson and the Consular Service," in *Political Science Quarterly*, XXI, 626, Dec. 1906.
PURDY, T. C. *Report on the Canals of the United States* (in U. S. Census 1880, IV).
REINSCH, PAUL S. *Public International Unions*, etc. (1911).
RENNINGER, WARREN D. *Government Policy in Aid of American Shipbuilding* (A thesis; University of Pennsylvania, 1911).

SHELTON, WILLIAM A. "The Lakes-to-the-Gulf Deep Waterway," etc. (in *Journal of Political Economy*, XX, Nos. 6, 7, 8, 1912).

SMITH, R. A. C. *The Commerce and other Business of the Waterways of the State of New York*, etc. (Prepared for the governor of New York, etc., 1914).

SOLEY, J. R. The Maritime Industries of the United States (vol. 1, N. S. Shaler, *The United States of America*, 1894).

UNITED STATES:

Congress—

Laws of the United States Relating to the Improvement of Rivers and Harbors from August 11, 1790 to March 4, 1907 (House Doc. No. 425, 58 Cong., 3 sess., 2 vols., 1907).

House Reports—

Report of Lynch Committee on Causes of the Reduction of American Tonnage (No. 28, 41 Cong., 2 sess., vol. 1, 1870).

Report of Committee on Foreign Affairs on the Improvement of the Foreign Service (No. 840, 62 Cong., 2 sess., 1912).

Senate Reports—

Report of the Merchant Marine Commission (No. 2755, 58 Cong., 3 sess., 1905).

Department of Commerce—

Bureau of the Census (in Department Commerce and Labor, 1903–1913)—

Official Register of the United States (or Blue Book). (1816– . Biennial since 1817. 1 vol. 1816–1879; 2 vols. 1879– .) Issued by Department of State, 1816–1859; Department of the Interior, 1861–1905.

Bureau of Navigation (established 1884; in Department of Commerce and Labor, 1903–1913). *Annual Report*, 1884– .

Steamboat-Inspection Service (in Department of the Treasury, 1838–1903; Department of Commerce and Labor 1903–1913.) *Annual Report of Supervising Inspector-General* (1880–).

Department of Commerce and Labor (divided by act of March 4, 1913, into Department of Commerce and Department of Labor)—

Organization and Law of the Department of Commerce and Labor (1904.

Bureau of Foreign and Domestic Commerce, *Promotion of Commerce* (Miscellaneous Series Nos. 6, 6*a*, and 6*b*, 1911–1912).

Department of Labor—

Bureau of Immigration (in Department of the Treasury, 1891–1903; in Department of Commerce and Labor, 1903–1913). *Annual Report of Commissioner-General of Immigration* (1895–). Statistics of immigration collected by Department of State, 1819–1874; by Bureau of Statistics, Department of the Treasury, 1869–1895.

Department of the Navy—

Secretary, *Annual Report* (1823–).

Department of State—

Secretary—

History of Department of State (1901).

Outline of Organization and Work of the Department of State (1911).

Register of Department of State (annual, 1869–).

Department of the Treasury—

Public Health and Marine Hospital Service. *Annual Reports of Surgeon-General* (1872–).

Department of War—

Secretary, *Annual Report* (1823–).

URQUHART, G. D. (compiler). *Dues and Charges on Shipping in Foreign Ports* (1905).

VAN DYNE, FREDERICK. *Our Foreign Service: The A-B-C of American Diplomacy* (1909).

INDEX.

Act of 1650, I, 38.
Act of 1651, chief provisions of, I, 39, 41, 50.
Act of 1660, I, 40, 41, 42, 50, 141, 165.
Act of 1663, I, 41, 50, 151, 165.
Act of 1673, I, 42, 43, 50, 165, 166, 167.
Act of 1696, I, 43, 50, 166.
Act of 1699, I, 45.
Act of 1733, I, 43, 100, 156.
Act of 1750, I, 46.
Act of 1764, I, 100.
Acts of Trade, discussion of, I, 35; evasion of, by colonies, I, 166; summary of effects of, I, 52; *see also* British Trade Acts and Navigation Acts.
Adams, John, work of, in peace negotiations, I, 159.
"Adventurers" finance Plymouth Colony, I, 187.
African slave trade, beginnings of, I, 100.
Agriculture, development of, 1860–1900, I, 257; importance of, in early colonial history, I, 70.
Agriculture, Department of, establishment of, II, 254.
Agricultural industries, development of, in Central States and Southwest, II, 41; growth of, 1900–1910, I, 313.
Agricultural products, increase of, after 1790, II, 19.
Alaska, acquired by the United States, II, 99; canning of salmon in, II, 214; discovery of, II, 99; discovery of gold in, II, 99; market for American wares in, II, 101; purchase of, by United States, II, 217; trade with, II, 99.
Alaska Commercial Company, II, 218.
Allegheny Mountains, first great westward movements over the, I, 15.
Allegheny passes, and the beginnings of western commerce, I, 14.
Allerton, Isaac, agent of Plymouth Colony, I, 26.
America, *see* United States.
American coastwise trade, *see* Coastwise Trade.
American commerce, British regulations affecting, 1783–1795, I, 129; conditions affecting, 1783–1789, I, 127; documentary sources and other references on, I, 113; during eighteenth century to the Revolution, summary of development of, I, 110; early development of, 1660–1700, I, 66–83; in 1660, general survey of, I, 33; sources of statistical information concerning, I, 112; *see also* Commerce.
American commercial policy, 1776–1789, I, 132–144; determined by the States, I, 132.
American fisheries, before 1789, I, 145–161; from the Peace of Paris to the Revolution, I, 156; in the sixteenth century, I, 146; *see also* Fisheries.
American foreign trade, changes in destination and routes of, I, 130; survey of, at beginning of national period, II, 3–13.
American-Hawaiian Steamship Company, I, 362.
"American system," inauguration of, I, 219; effect of, I, 220; rise of, II, 53.
Amsterdam Company, charter granted to, I, 28, 177; *see also* New Netherland.
Anti-trust Act, enactment of, I, 294.
Appalachian Valley, an influential factor preceding the Revolution, I, 13; exceptional fertility of, I, 12; location of, I, 12.
Arbitration of fur-seal fisheries dispute, award of arbitrators in, II, 237; questions submitted, II, 236.
Arbitration of North Atlantic fisheries dispute, award in, II, 232; questions submitted, II, 231.
Atlantic and Gulf coasts, coastwise trade of, since 1860, I, 348, 356; extent and value of fisheries of, II, 182; fisheries of, II, 179–201.

Baltimore and Ohio Railroad, beginning of, I, 221.
Bank of Massachusetts, II, 19.
Bank of New York, II, 19.
Bank of North America, I, 303; II, 19.
Bank of the United States, First, I, 304; II, 19; Second, I, 217, 304.
Banking, conditions after 1790, II, 19; enactment of National Banking Act, II, 63; Federal Reserve Act, I, 322; organization of Federal and State, I, 303; safety-fund system in, I, 305; service of, to commerce, I, 307; wildcat, II, 63.
Banks, regulation of, by the States and the consequences, I, 305.
Barbary pirates, defeat of, I, 160; II, 17.
Bering, Vites, discovers Alaska, II, 99.
Berlin decree issued, II, 30.
Bibliography, 352–386; general references, II, 363.
Bills of exchange, types of, II, 131.

Black Ball Line, establishment of, I, 186; II, 121.
Blaine-Bond convention negotiated, II, 230.
Blessing of the Bay, launching of, I, 72.
Blockade-running, II, 57.
Board of Customs Commissioners, establishment of, I, 112, 115.
Bond-Hay convention, II, 230.
Boston, coastwise entrances at, 1902 and 1911, I, 355.
Boston Tea Party, II, 49.
Bounties, by the colonies, I, 60; effects of, on exports, I, 61; in aid of the cod fishery, II, 162; on lumber in 1765, I, 106; to fisheries in 1789, 1790, 1792, II, 10; two distinct kinds of, I, 61.
Boxer troubles in China, II, 148, 152.
British commercial policy, effects of, upon colonial industry, commerce and manufactures, I, 49; most significant feature of, I, 50.
British legislation, effects of, upon colonial trade, I, 182.
British mercantile system, failure of, I, 53; leading principles of, I, 47, 49.
British Navigation Acts, colonial coastwise trade and the, I, 165; general purposes of, I, 182.
British regulation of colonial manufactures, I, 44.
British taxes on commerce of the colonies, failure of, I, 107.
British Trade Acts, general purposes of, I, 182; *see also* Acts of Trade.
Bureau of Corporations, establishment of, I, 321; II, 263.
Burke, Edmund, statement of, regarding colonial trade, I, 88.

Cable and wireless telegraphy, establishment of, II, 127.
Cabot, John, discovery by, I, 146.
Cabot, S., discovers Newfoundland, I, 18.
California Débris Commission, II, 328.
Canada, trade reciprocity with, II, 340.
Canadian canals, treaties regarding, II, 143.
Canal, interoceanic, treaties regarding, II, 141.
Canals, building and aiding of, by the States, I, 221; completion of many, after 1830, I, 227.
Cape Horn, intercoastal trade via, I, 362.
Cape merchant, functions of, I, 22, 23.
Carolinas, early commerce of, I, 80; retarded development of, I, 69; where settlement began in the, I, 11.
Carp, introduction of, into United States, II, 208.
Carroll, Charles, officiates at beginning of construction of Baltimore & Ohio Railroad, I, 221.
Carrying trade, growth of, 1790–1807, II, 27; 1865–1900, II, 84; *see also* Vessel.
Census, Bureau of the, work of, II, 257; the first, II, 256.
Central States, resources and industrial characteristics of, I, 198; trade of, with Eastern States via waterways, I, 230.
Cereals and flour, history of trade in, 1860–1900, I, 271.
Chamberlain-Bayard convention negotiated; *modus vivendi*, 1888, II, 229.
Charter traffic, I, 187; II, 119.
Chartered companies, powers granted to, I, 20; services of, in settlement and early commerce of America, I, 18; summary of contribution of, to early development of American commerce, I, 121; why constituted, I, 19.
Chicago, connected with New York by rail, I, 228; spectacular growth of, I, 235.
China, commencement of direct trade with, II, 146, 336; commercial treaties with, II, 145.
"Chinese Hongs," II, 26.
Cincinnati, internal trade of, 1830–1860, I, 244; "Porkopolis" of United States, I, 214.
Civil War, changes effected by, in foreign trade, II, 54–63; changes in coastwise trade after the, I, 348; changes produced by, I, 254; coastwise trade and the, I, 347; conditions antecedent to, I, 253; effects of, upon import trade, II, 58; epochal in history of foreign commerce, II, 63; foreign trade from the Treaty of Ghent to, II, 31–53; recorded exports and imports during the, II, 55.
Clam fishery, II, 178, 192.
Clay, Henry, and the tariff bill of 1824, I, 219.
Clayton-Bulwer Treaty negotiated, I, 358; II, 141.
Clinton, De Witt, work of, in construction of Erie Canal, I, 216, 220.
Coal, trade in, 1860–1900, I, 283.
Coast and Geodetic Survey, work of, II, 257.
Coastal plain, easy cultivation of, I, 10; main products grown upon, I, 11; make-up of, I, 9.
Coastwise carriers, proposed Federal regulation of, I, 356.
Coastwise fleet, increase of, 1830–1850, I, 342.
Coastwise lines, after 1860, I, 350; competition of railroads with, 1850–1860, I, 345; ownership of, by railroad corporations, I, 356.
Coastwise trade, after the Revolution, I, 172; at leading seaports, I, 339; before 1789, I, 162–174; beginning of the, I, 162; between northern and southern colonies, I, 169; bibliography on, *see* Internal Commerce; British Navigation Acts and the, I, 165; development of, to 1830, I, 332, 1880–1900, I, 351; favorable conditions

Coastwise trade—*continued.*
for, in northern colonies, I, 164; foreign vessels excluded from, I, 336; 1830–1850, I, 341, 1850–1860, I, 345; growth of, 1900–1912, I, 353; importance attached to, by the South, I, 347; incompleteness of statistics of, I, 352; increase in, 1850–1860, I, 346; law of 1906 establishing five "great districts" in, I, 353; legislation concerning, I, 328; nature and volume of, in 1830, I, 338; of Atlantic and Gulf coasts since 1860, I, 348–356; of Atlantic coast, 1789–1860, I, 327–347; of Pacific coast and the intercoastal trade, I, 357–363; ratio of, to foreign commerce in 1789, II, 8; recent expansion of, II, 304.
Coastwise vessels, Government aid to, II, 303.
Cod, most important fish of commerce, I, 150; three grades of, I, 151.
Cod and mackerel fisheries, vessels engaged in, 1870–1910, II, 174.
Cod fishery, after 1789, II, 161; bounties in aid of, II, 162; importance of, 1789–1860, II, 165; increase in fleet, II, 163; leading States engaged in, II, 165; of Alaska, II, 221; provisions of act of 1819 regarding the, II, 163; revival of, 1786–1790, I, 160; statistics of, 1853, II, 166; 1860–1910, II, 173.
Coin, insufficient supply of, I, 109; scarcity of, I, 82; standard, at close of seventeenth century, I, 82.
Colonial manufactures, British regulation of, I, 44.
Colonial trade, and trade to 1789, bibliography on, II, 353, 369; effects of British legislation upon, I, 182; *see also* Trade.
Colonies, commerce of, during eighteenth century to outbreak of Revolution, I, 84–121; commercial policy of, I, 54–65; economic and political status of, 1660–1700, I, 67; illegal trade of, during Seven Years' War, I, 96; important land influences upon life and growth of, I, 7; leading industries of, 1660–1700, I, 69; maritime trade of, as a whole, 1660–1700, I, 73; statistics of trade between Great Britain and, 1697–1776, I, 120; trade of, with sections of world outside of Great Britain, I, 90; trade of, with the French at Monte Cristi, I, 98; value and distribution of trade of, in 1769, I, 92; widening of breach between, and mother country, I, 157; *see also* particular colonies.
Colonists, landing of, on James River, I, 22.
Colony, location of first permanent, in America, I, 10.
Commander Islands, discovery of, and seal rookeries on, II, 216.
Commerce, authority exercised by Parliament over, I, 55; beginnings of, I, 17–34; clause of the Constitution, II, 242; colonial laws regarding, I, 56; development of, resultant of many forces, I, 3; effect of wars upon, I, 84; Federal regulation of, before 1789, II, 241; geographic factors affecting the early development of American, I, 3; growth of, after establishment of National Government, I, 184; influence of consular service upon, II, 267–294; in seventeenth and eighteenth centuries, organization of American, I, 175–189; legislative power of colonies over, I, 54; machinery of Federal regulation of, II, 241–266; necessity of revenue from, I, 144; of colonies during Revolution and Confederation, I, 122, 131; of colonies from Peace of Paris to Declaration of Independence, I, 105; public regulation of, since 1900, I, 321; restriction of, during colonial period, I, 15; value and growth of, prior to Revolution, I, 88; western, the beginnings of, I, 14; *see also* American Commerce, British Commercial Policy, Colonial Trade, Colonies, Foreign Trade, Internal Commerce and Trade.
Commerce and Labor, Department of, organization of, II, 242.
Commerce Court, created and abolished, I, 320; II, 265.
Commerce, Department of, commercial activities of, II, 255.
Commercial changes of the opening years of the twentieth century, I, 312–323.
Commercial conditions of colonies at close of seventeenth century, I, 81.
Commercial legislation during the Revolution, I, 133; in the colonies, summary of, I, 64; of the Confederation, I, 142.
Commercial outlook in the colonies in 1790, II, 12.
Commercial policy, of England toward the American colonies, I, 35–53; of the colonies, I, 54–65.
Commercial treaties and agreements, special, II, 140.
Commercial treaties of the United States, II, 135–153.
Common carrier on the sea, appearance of the, I, 186, 189; II, 118.
Company of Feltmakers of England, petition of, to Parliament, I, 45.
Confederation, commercial legislation of the, I, 142.
Congress, committees of, concerned with commerce, II, 266.
Conservation movement, the, I, 323.
Constitution, adoption of, aids trade and navigation, II, 17; provisions of, regarding commerce, I, 173.
Consul, the first United States, II, 269.

Consul-general, duties of, II, 286.
Consular agents, duties of, II, 287.
Consular reform, acts of 1855–1856 regarding, II, 274.
Consular reports, publications containing, II, 290.
Consular service, act of 1908 regarding, II, 284; acts of 1790 and 1792 regarding, II, 271; activities of, in promoting trade, II, 290; appointment of director of, II, 284; defects in, II, 279; efforts to reform, II, 279; executive actions regarding, II, 279, 281, 282, 283; extension of merit system in, II, 283; 1789–1856, II, 271; Lodge Act regarding, II, 281; organization and supervision of, in 1913, II, 285; origin of, II, 267; pre-constitutional, II, 268; reorganization of, II, 281; unresponsive to commercial needs, 1856–1906, II, 276.
Consular service of the United States: its history, commercial function, and influence upon American commerce, II, 267–294.
Consuls, duties of, II, 270, 289; duties performed by, 1776–1789, II, 267; legislation regarding, prior to 1856, II, 273; personal service of, to facilitate trade, II, 293; required to certify invoices of imports, II, 273; services of, in preventing frauds against customs, II, 293.
Consuls and consuls-general, number of, and salaries paid to, in 1912, II, 285.
Continental shelf of North America, description of, I, 5.
Copyrights, agreements regarding international, II, 144.
Corn laws, effect of, on the colonies, I, 16.
Corporations, advantage of, I, 309; development of, I, 308; evils resulting from lack of regulation of, I, 309.
Corporations, Bureau of, establishment of, I, 321; II, 263.
Cotton, beginning of "overland movement" of, I, 247; building of first cotton mill in America, I, 174; exports of, 1870–1900, II, 67; increase in crop of, 1830–1837, II, 41; industry, importance of, to coastwise trade, I, 332; trade in, 1860–1900, I, 278; trade, middlemen in, II, 129.
Coxe, Tench, statesman and author, II, 5, 6.
Crab fishery in 1908, II, 193.
"Cropping system," II, 60.
Cuba, reciprocity treaty with, II, 344.
Cumberland Road, appropriation for, II, 320.
Customs, services of consuls in preventing fraud against, II, 293.
Customs Appeals, Court of, II, 265.
Customs Service, functions of, regarding commerce, II, 246.
De Bow, J. D. B., on the indirect trade of the South, II, 44.
Delaware, commerce of, 1660–1700, I, 78.
Delaware River, early farming on banks of, I, 11.
Derby, Elias H., mercantile activities of, I, 185.
Discriminating duties in aid of American shipping, I, 139; II, 295.
Domestic commerce, bibliography on, II, 354, 373; *see also* Internal Trade.
Drawbacks, chief application of policy of, I, 59; general effects of English system of, I, 48; in aid of colonial industries and trade, I, 47.
Dutch, colonists' trade with, during Civil War in England, I, 39; the first to develop extensive coastwise trade, I, 162.
Dutch West India Company, activities of, I, 29; chartered, I, 28; dual system of trade of, I, 29; New Netherland commerce monopolized by, I, 176; trade of, in slaves, I, 101.

East India Company, I, 185.
East Jersey, a dependency of New York, I, 68; *see also* the Jerseys and New Jersey.
Eastern States, trade of, with Central States via waterways, I, 230.
Economic progress, analysis of conditions controlling, I, 3.
Electric railways, growth in number of, 1900–1910, I, 317.
Electricity, use of, for motive power, I, 317.
Elkins Act, main provisions of, I, 319.
Embargo Act of 1807, II, 7, 30.
Embargo and non-intercourse acts, effects of, on coastwise trade, I, 334.
Embargoes, after 1777, I, 133; imposed by the colonies, I, 63; of 1813, I, 212.
English, why drawn to America in sixteenth century, I, 17.
English bounties for encouragement of colonial industries and trade, I, 46.
English Corn Laws, repeal of, I, 231.
English political policy, fundamental feature of, I, 147.
Enumerated articles, colonists evade paying duties on, I, 43; restriction on shipment of, I, 40.
Erie Canal, beginning of, I, 216; early traffic on, I, 230.
Exchanges, functions and development of, I, 300.
Explorations lead to trade with early settlers, I, 7.
Export duties of the colonies, I, 59.
Export trade, centers of, 1790–1800, II, 22; effects of Civil War upon, II, 54; reasons for growth of, after 1789, II, 15; *see also* Foreign Trade.

Exports, after War of 1812, reasons for increase in, II, 33; changes in foreign markets for, 1900–1913, II, 90; changes in nature of, 1900–1913, II, 87; destination of, 1846–1860, II, 50; domestic, 1865–1900, II, 69; leading, of United States, 1865–1900, II, 66; of merchandise from United States, by continents, 1866–1900, II, 75; statistics of, from the colonies, 1770, I, 118.
Exports and imports of the United States, value of, 1815–1818, II, 32; 1819–1830, II, 38; 1830–1836, II, 42; 1836–1846, II, 45; 1846–1860, II, 48; during the Civil War, II, 55; 1865–1900, II, 65.
Express service (domestic), origin of, I, 298.
Express service (international), companies engaged in, II, 125; establishment of, II, 124.
Extraterritorial functions of consuls, II, 288.

Fall Line, location of, I, 9; prosperous cities along the, I, 10.
Far East, direct trade with, I, 185.
Far West, internal trade of, 1830–1860, I, 248.
Farm products, trade in, 1860–1900, I, 282.
Federal regulation of commerce, machinery of, II, 241–266.
Federal Reserve Act, enactment of, I, 322.
Federal Trade Commission, organization of, II, 264.
Feudal system, abolished in Japan, II, 75, 151.
Fiat money, use of, in the colonies, I, 109.
Field, Cyrus W., II, 127.
Fish, Alaskan trade in, II, 100; exports of domestic, 1830–1860, II, 165; products, change in relative importance of, since 1860, II, 170; resources of the Atlantic and Gulf coasts, II, 180; why so plentiful in North Atlantic, I, 5.
Fisheries, a source of wealth, I, 72; as an international question, II, 223–238; Atlantic and Gulf coasts, II, 179–201; bibliography on, II, 360, 383; conservation methods to perpetuate, II, 169; development of, after Peace of Paris, I, 106; effect of Revolution upon, I, 158; Government aid to, II, 304; Great Lakes and the Mississippi River system, II, 202–210; Great Lakes, 1908, statistics of, II, 203; Gulf coast, statistics of principal, 1908, II, 185; Middle Atlantic States, statistics of principal, 1908, II, 184; Mississippi Valley States, 1908, II, 208; most important factor in New England's development, I, 6; New England, 1789–1860, II, 157–168; New England, since 1860, II, 169–178; North Atlantic, arbitration of dispute regarding, II, 231; Pacific coast, II, 211–222; South Atlantic States, statistics of principal, 1908, II, 184; status of, in 1789, II. 9; struggles with France over the, I, 153; treaties of 1783 and 1818
Fisheries—*continued.*
regarding, II, 223; Treaty of Washington in regard to, II, 227; United States, general development of, since 1860, II, 169; when begun, II, 204; *see also* American Fisheries.
Fishery industry of Atlantic and Gulf coasts, statistics of, 1908, II, 183.
Fishery products, value of, 1880–1898, II, 170.
"Fishery question," beginning of, II, 165, 223.
Fishing-grounds, North Atlantic coast, richest in the world, I, 146.
Fishing industries, aided by Navigation and Trade Acts of 1660 and 1663, I, 151.
Fishing rights opposed by British Government, II, 164.
Floods, measures for prevention of, II, 330.
Forbes Road, I, 204.
Foreign Affairs, Department of, creation of, II, 244.
Foreign and Domestic Commerce, Bureau of, work of, II, 258; publications of, II, 258.
Foreign and domestic trade in 1790, II, 6.
Foreign markets, development of, for American manufactures, 1900–1913, II, 95; growth of, 1865–1900, II, 72.
Foreign trade, abnormal advance in, 1815–1818, II, 31; activity in, 1790–1807, II, 14; after-effects of Civil War upon, II, 59; aided by European wars, II, 18; changes effected in, by Civil War, II, 54–63; bibliography on, II, 356, 376; decline in, 1807–1815, II, 29; decline in, 1819–1830, II, 37; decline greatest in Atlantic States, II, 39; destination of, II, 24; encouragement to, by Federal Government, II, 16; extension of, into distant countries, II, 25; from Civil War to close of nineteenth century, II, 64–85; from Treaty of Ghent to Civil War, II, 31–53; improvements in, 1831–1836, II, 41; in early years of twentieth century, II, 86–97; irregular status of, 1837–1846, II, 44; 1847–1860, II, 46; localities affected by growth in, II, 43; mostly with Great Britain in 1790, II, 6; obstacles to, 1900–1913, II, 96; organization of, II, 116–134; stimulated by opening of inland waterways, II, 42; summary of, 1815–1860, II, 51; survey of, at beginning of national period, II, 3–13; widened basis of, 1865–1900, II, 81; wider distribution of, 1900–1913, among United States ports, II, 94; 1790–1815, II, 14–30; *see also* Export Trade and Exports.
Foreign trade and shipping of the United States, tariff provisions concerning, II, 335–351.
Forest products, growth of, 1900–1910, I, 316; trade in, 1860–1900, I, 287.
Forest resources, appropriation of, I, 71.
France, loses her continental possessions in North America, I, 155; naval warfare with, II, 18; treaty of amity and commerce with, 1778, II, 268.

Franklin, Benjamin, establishment of postal union under, II, 126.
French, activities of, in early Newfoundland fisheries, I, 148; fishing operations by, in 1578, I, 18.
French West India Company, trade monopoly granted to, I, 94.
Fulton, Robert, I, 213.
Fur, Alaskan trade in, II, 99; early trade in, I, 71; Hudson Valley trade in, I, 7.
Fur-seal fisheries, agreement of United States, Great Britain, Russia, and Japan regarding, II, 238; award of arbitrators in, II, 237; controversy over, II, 235; questions submitted regarding arbitration of, ii, 236.

Gallatin, Albert, plan of, for internal improvements, II, 320.
General Court of Massachusetts aids the fisheries, I, 150.
Genesee Road, I, 220.
Geographic control, general results of, I, 15.
Geographic influences affecting early development of American commerce, I, 3–16.
Georgia, products raised by early settlers in, I, 11; settlement of, I, 69.
Gilbert, Sir Humphrey, voyage of, to Newfoundland, I, 147.
Girard, Stephen, mercantile activities of, I, 186.
Glaciation and its consequences, I, 8.
Gold, discovery of, in Alaska, II, 99; in Australia, II, 46, 51; in California, I, 358; II, 46; in Colorado, II, 46.
Gosnold, Bartholomew, names Cape Cod, I, 148.
Government aid and commercial policy, bibliography on, II, 361.
Grain, creation of world markets for, II, 49; receipts and shipments of, at Chicago, 1860–1900, I, 272, at primary markets, 1900, I, 273; trade, 1838–1860, I, 231.
Grand Banks fisheries, I, 72, 146; II, 173.
Great Britain, indirect trade of colonies with, during Revolution, I, 122; statistics of trade between, and colonies, 1697–1776, I, 120; trade of, with colonies, 1700–1780, I, 74, 89, after Revolution, I, 125.
"Great districts" established, I, 336.
Great Lakes, canals, treaties regarding, II, 143; commission in control of waters of, II, 329; district, development of, I, 234; growth of shipping on, 1830–1860, I, 233; growth of traffic in cereal trade via, 1860–1900, I, 274; traffic via, 1830–1860, I, 231; vessels on, to be separated from railroad control, II, 334.
Great Lakes fisheries, after 1870, II, 205; culture of fish for, II, 206; growth of, 1880–1908, II, 202; location of early, II, 204; statistics of, 1908, II, 203.
"Great Valley," location of, I, 12.
Great Western, first steamship for transatlantic service, II, 261.
Grenville-Townshend Acts, 1764–1770, I, 48; final results of, I, 49.
Gulf and Atlantic coasts, coastwise trade of, since 1860, I, 348–356; fisheries of, II, 179–201.
Gulf ports, coastwise commerce at, 1830–1850, I, 344.

Halibut fishery, 1819–1860, II, 167; on Pacific coast, II, 220.
Halifax Commission, II, 228.
Hamburg-American Packet Co., services of, II, 122.
Hamilton, Alexander, constructive work of, I, 184, 303, 304; II, 7.
Harbors, improvements of, II, 319–324.
Harnden, William, originates the express service, I, 298; II, 124.
Hawaiian Islands, exports from, II, 103; sugar industry in, II, 103; trade with, II, 101; United States takes possession of, II, 101.
Hawaiian reciprocity treaty, II, 341.
"Headlands theory," seizure of fishing-vessels under, II, 225.
Henry, Patrick, on commerce, I, 143.
Hepburn amendment to interstate commerce act, I, 320.
Herring fishery, 1789–1860, II, 167; in 1908, II, 197.
Herring industry of the Great Lakes, II, 206.
Hongkong ceded to Great Britain, II, 146.
Hudson River, discovery of, I, 28.
Hydrographic Office, establishment and work of, II, 252.

Illegal trading of colonies during the Seven Years' War, I, 52, 96; with the French at Monte Cristi, I, 98.
Immigration, Bureau of, work of, II, 263.
Import duties, articles which paid most of, I, 59; between 1783 and 1785, I, 135; during the Revolution, I, 134; four purposes of colonial, I, 57; 1785–1789, I, 136; of the colonies, I, 56.
Import trade, development of, 1847–1860, II, 50; effects of Civil War upon, II, 58.
Imports, changes in nature and source of, 1900–1913, II, 92; growth of, 1790–1807, II, 23; increase in, after the War of 1812, II, 35; into the United States, by continents, 1865–1900, II, 80; sources of, II, 78; value by groups of the leading, 1865–1900, II, 76.
Imports and exports, changing relations between, 1870–1900, II, 66.
Impost duties, policy of various States regarding, 1776–1789, I, 138.
Impost legislation of Massachusetts, I, 136.

Impost system, New York only colony that continuously maintained an, I, 57.
Industrial and commercial changes, 1700–1775, I, 86.
Industries, American, best first-hand account of, II, 5; development of, 1830–1860, I, 225; in 1790, II, 4.
Industry, differentiation of, I, 208; growth of, 1900–1910, I, 313.
Inland transportation in 1789, I, 203.
Inland waterways, bulk traffic on, I, 201; decrease in traffic on, after 1900, I, 318.
Inland Waterways Commission, report of, II, 326.
Inspection laws enacted by the colonies, I, 62.
Insurance Company of North America organized, II, 132.
Intercoastal trade, beginnings of, I, 358; 1869–1913, I, 361.
Intercolonial coastwise trade, character and volume of, before 1789, I, 167.
Intercolonial trade, beginnings of, I, 31; carried on via England, I, 42.
Interior, Department of the, work of, regarding commerce, II, 253.
Internal commerce, bibliography on, II, 354; by rail, tonnage of, in 1910, I, 200; definition of, I, 193; development of, 1789–1830, I, 202–223; 1900–1910, I, 316; expansion of, 1830–1860, I, 224–253; 1860–1900, I, 270–295; in 1810, I, 210; large increase in volume of, 1830–1860, I, 229; larger in volume than foreign trade, I, 193; organization and management of, I, 296–311; "right of deposit" at New Orleans, I, 206, 333; summary of expansion of, 1830–1860, I, 250; summary of, in 1830, I, 222; summary of status of, 1860–1900, I, 293; volume and general character of, I, 193–201; *see also* Commerce and Trade.
Internal improvements, causes of opposition to, II, 322; Gallatin's plan for, II, 320; objections of President Jackson to, II, 321; *see also* Rivers and Harbors.
International conventions, agreements, unions, and other acts, II, 152.
International express service, II, 124, 125.
International mail services and payments, II, 126.
International trade, financing of, II, 130; organization of, II, 128.
International Waterways Commission, II, 329.
Interoceanic canals, treaties regarding, II, 141.
Interpreters, duties of, II, 287.
Interstate Commerce Commission, a strong administrative body, I, 320; establishment of, II, 264; power of, over carriers by water, II, 332.
Iron manufacturing, beginnings of, I, 45; legislation against colonial, by England, I, 45.
Iron ore, iron and steel, trade in, 1860–1900, I, 285.

Jamestown, preference of settlers at, for mining, I, 17.
Japan, commercial treaties with, II, 149; feudal system abolished in, II, 75, 151.
Jay, John, II, 15; treaty negotiated by, I, 143.
Jay Treaty, not satisfactory to United States, II, 17.
Jefferson, Thomas, report by, I, 151; II, 7, 162.
Jerseys, the, early commerce of, I, 78; reason for slow growth of, I, 68.
Justice, Department of, establishment of, II, 251.

Kidd, Captain, I, 83.

Labor, Department of, establishment of, I, 242, 263.
Laconia Company, a type of early trading company, I, 28.
Lake fish, varieties of, II, 203.
"Land" banks, I, 110.
Land grants to railroads, II, 62.
Life-saving stations, first established, II, 249.
Lighthouse Service, work of, II, 256.
Live-stock and animal products, early transportation of, from the West, I, 239; increase in value of, 1859–1899, I, 261; statistics of, 1900–1910, I, 314; trade in, 1860–1900, I, 276.
Lloyds' Association of London, the leading organization of marine insurance companies, II, 133.
Lobster fishery, after 1842, II, 177; in 1830, II, 168.
Locke's "Grand Model" government, I, 69.
Lodge Act regarding consular service, II, 281.
London Company, a private commercial venture, I, 23; and early trade with Virginia, I, 21; charter annulled, I, 24; dissolution of, I, 38; financial failure of, I, 22, 23; first charter to, I, 21; monopoly principle of, I, 24; raises funds by lotteries, I, 24; second charter to, I, 23.
Louisburg, capture of, I, 155.
Louisiana, purchase of, I, 209.
Lumbering, development in, 1860–1900, I, 263.

Mackerel fishery, 1819–1860, II, 166; 1860–1910, II, 173.
McMaster, J. B., on the early carrying trade of United States, II, 27.
Magellan discovers Philippine Islands, II, 107.
Mail services and payments, international, II, 126.
Manila, commercial importance of, II, 107, 112.

Manufactures, development of, 1830–1860, I, 226; growth of, 1808–1812, I, 211; increase in exports of, 1900–1913, II, 88; progress of, 1860–1900, I, 290; three important laws passed to restrict colonial, I, 45.
Manufacturing, development in, 1860–1900, I, 263; early, in the colonies, I, 72; growth of, 1900–1910, I, 315.
Marconi, G., transmits first wireless transatlantic signal, II, 128.
Marine insurance, II, 132.
Maritime trade, dangers of, I, 85; of colonies as a whole, 1660–1700, I, 73.
Markets and exchanges, functions and development of, I, 300.
Maryland, early trade of, I, 31.
Maryland and Virginia, early commerce of, I, 79; early development of, I, 69.
Massachusetts, impost legislation of, I, 136.
Massachusetts Bay Colony, early trade organization of, I, 26; established by Council for New England, I, 19; organization and management of commerce in, I, 27.
Massachusetts Bay Company, I, 149.
Mayflower, I, 187; size of, I, 181.
Maysville and Lexington turnpike veto, II, 321.
Menhaden fishery, after 1870, II, 200; early, II, 168; of New England, II, 176.
Menhaden oil and fertilizer industry, II, 168, 176, 199.
Mercantile system, chartered companies, one expression of, I, 19.
Mercantile theory, status of, I, 35.
Merchant carrier, period of the, I, 178; II, 117.
Merchant marine, effect of Civil War upon, II, 61; static condition of, to 1913, II, 97.
Merchant princes, I, 185; II, 117.
Merchants, why they were their own carriers in seventeenth and eighteenth centuries, I, 179.
Michigan, first iron warship, II, 315.
Middle colonies, profit to, from West India trade, I, 16.
Milan decree issued, II, 30.
Minerals, trade in, 1860–1900, I, 286.
Mining, development in, 1860–1900, I, 262; increase in, 1900–1910, I, 316.
Mississippi River, an outlet for trade of Ohio Valley, I, 205; decline of traffic on, after 1860, I, 269; diversion of traffic from the, I, 246; early traffic on, I, 210; effect of closing of, I, 206, 209; increase in traffic on, I, 209; opening of, I, 206; system, fisheries of the, II, 207–210; use of steamboats on, I, 213.
Mississippi River Commission, II, 328.
Mississippi Valley, commerce of, I, 242; opening of, II, 47.
Missouri Compromise, I, 337.
Missouri River Commission, II, 328.
Mohawk Valley Road, I, 204.
Molasses, no imposts on, after 1690, I, 47.
Molasses Act of 1733, an economic and political blunder, I, 44; duties imposed by, I, 100; provisions of, I, 43; vigorous protest against enforcement of, I, 156.
Monetary conditions after Civil War, I, 295; as affecting commerce in eighteenth century, I, 108.
Money, basis of, in colonies, I, 109; supply of, after the Revolution, I, 135; "trade dollar" coined for Oriental trade, II, 75; *see also* Banking, Panics, and Paper Money.
Monroe Doctrine announced, I, 337.
Morse, Samuel F. B., invents the telegraph, I, 299.
Most-favored-nation clause in treaties, II, 137.
Mullet fishery, II, 198.
Mussel fishery, II, 209.

Napoleon issues Berlin and Milan decrees, II, 30.
National Banking Act, enactment of, I, 306.
National Government, establishment of, I, 184.
National Rivers and Harbors Congress, organization of, II, 326.
National Waterways Commission, report of, II, 327.
Naval stores, bounties on, by England, I, 46.
Navigation, Bureau of, work of, II, 262.
Navigation Acts, of unquestionable benefit to Colonies, I, 50; of 1651, I, 39, and 1660, I, 40, 41; origin of, I, 37; principles embodied in, I, 38; *see also* Acts of Trade.
Navigation laws after the Revolution, I, 141.
Navigation treaties, general, II, 135.
Navy, decadence of, after Civil War, II, 316; influence of, on ship-building, II, 313.
Navy, Department of the, creation of, II, 252.
New Amsterdam, trade at, I, 177.
New England, commerce of, 1660–1700, I, 75; controlling interest of manufacturing activities of, I, 77; early importance of West India trade of, I, 32; favorable conditions in, for coastwise trade, I, 163; geographic environment of, I, 15; named by Captain John Smith, I, 25; population of, in 1700, I, 67; progress of, checked by King Philip's War, I, 68; relative unimportance of slavery in, I, 102; trade of Virginia with, I, 32; water-power in, I, 8.
New England Council, I, 25.
New England fisheries, development of, during seventeenth century, I, 148; dominant position of, prior to 1789, I, 145; extent of, in 1731, I, 154; prosperous conditions of, 1789–1860, II, 157; struggle for control of, I, 149; 1789–1860, II, 157–168; since 1860, II, 169–178.
Newfoundland, discovery of, I, 18; fisheries, made known by Cabot, I, 146; Govern-

Newfoundland—*continued.*
ment, trouble with, regarding the fisheries, II, 228, 230.
New Granada, treaty negotiated with, I, 357.
New Jersey, early trade of, I, 30; *see also* East Jersey and the Jerseys.
New Netherland, and its trade, I, 28; colony founded, I, 18; slow development of agriculture in, I, 30; trade opened to private residents in, I, 30; *see also* Amsterdam Company.
New York, canals, opening of, I, 220; coastwise entrances at, 1902 and 1911, I, 354; early commerce of, I, 77; not the empire colony, I, 68.
New Orleans, decline of, in coastwise trade after 1860, I, 350; first commerce of trans-Allegheny sections via, I, 15; internal commerce of, 1830–1860, I, 243; trade of, in 1818, I, 214.
Non-contiguous possessions, bibliography on trade with, II, 359, 381; trade with, II, 98–115.
North Acts, 1764–1770, I, 48.
North American Commercial Company, II, 218.
North American continent, beginning of struggle for control of, I, 148.
North Atlantic fisheries dispute, arbitration of, II, 231; decision regarding, II, 232.
North German Lloyd, beginning of, II, 123.
Northeastern States, resources and industrial characteristics of, I, 195.

Ocean carrying trade, decline in, II, 121.
Ocean, first steam vessel to cross the, II, 121.
Ocean mail payment law of 1891, II, 311.
"Opium war" in China, II, 146.
Oriental trade, early tariff provisions to aid, II, 336; growth of, II, 25; trade dollar for, II, 75.
Over-sea trade, attempts to establish line services in, I, 188; first organized line in, I, 186; hindrances to, I, 180.
Oyster fishery, after 1860, II, 177; Pacific coast, II, 221; prosperity of, after 1850, II, 189; statistics of, 1908, II, 186.
Oyster industry in South Atlantic and Gulf States, II, 192.
Oysters, early method of marketing, II, 187; planting or culture of, II, 190; shucking and canning of, II, 189; transplanting of, in waters of New England, II, 168; value and quantity of market and seed, 1908, II, 191; where found, II, 187.

Pacific coast, coastwise trade of the, I, 359.
Pacific coast fisheries, II, 211–222; growing value of, II, 222; introduction of Atlantic coast fish to, II, 222; location of, II, 211.
Pacific Coast States, resources and industrial characteristics of, I, 199.
Palfrey, William, the first consul, II, 269.
Pan American Union, establishment of, II, 264.
Panama Canal, general effect of, on intercoastal trade, I, 363; treaty regarding the, II, 142, 143.
Panama Canal Act, mail contract law amended by, II, 313; provisions of, regarding carriers by water, II, 333.
Panama, Isthmus of, intercoastal trade via, I, 358, 359, 361.
Panama Railroad, beginning of, II, 46.
Panics, 1785, I, 135; 1814, I, 212; 1818, II, 36; 1819, I, 216; 1837 and 1857, I, 252; 1837, 1857, 1873, I, 306; 1893–1895, I, 306.
Paper money, issue of, by colonies, I, 109, after the Revolution, I, 136; *see also* Money.
Parcel-post system, inauguration of, I, 321.
Patroon system introduced, I, 29.
Pearl buttons, manufacture of, in United States, II, 209.
Pelagic sealing, II, 218.
Penn, William, statement by, regarding the fisheries, II, 181.
Pennsylvania, commerce of, 1682–1700, I, 78; early stock raising in, I, 211; rapid development of, I, 68; tariff law of 1785, I, 137, 139.
Pennsylvania Canal system, trade via, I, 235.
Pennsylvania Railroad Company chartered, I, 237.
Perry, Commodore M. C., negotiates treaty with Japan, II, 150.
Peter, Hugh, raises capital for fishing business, I, 150.
Philadelphia, commerce of, in 1846, I, 343; leading manufacturing city in 1830, I, 339.
Philippine Islands, become an American colony, II, 107; beginning of direct trade with, II, 108; commercial value of, II, 112; discovery of, II, 107; imports into the United States from, II, 111; modification of tariff regulations in, II, 110; tariff regulations in, II, 109; trade with, under Spanish dominion, II, 107, and since American acquisition, II, 109.
Piedmont, extent of the, I, 11; products of the, during first half of seventeenth century, I, 12.
Pilgrims secure patent for a colony, I, 25.
Pilotage, regulation of, after the Revolution, I, 142.
Piracy, end of, among civilized countries, I, 83.
Pitkin, Timothy, on foreign trade, II, 14, 15.
Pittsburgh opened to railroad traffic, I, 228.
Plantation farming in the southern colonies, I, 70.
Plymouth Colony, early trade organization of, I, 25; financial difficulties of, I, 26; founding of, I, 19; purchases rights of "Adventurers" in England, I, 176.

Plymouth Company, a private commercial venture, I, 23; territory granted to, I, 21.
Population, and economic status of the colonies, 1660–1700, I, 67; growth of, 1900–1910, I, 313; in 1790, II, 3; of colonies in 1700 and 1760, I, 85; of United States, growth in, 1790–1810, I, 208.
Porto Rico, acquired by United States, II, 104; changes in commercial situation in, since American acquisition, II, 105; control of commerce of, II, 106; trade with, II, 104.
Ports, regulation and administration of, by colonies, I, 64.
Post-office Department, establishment of, II, 251.
Postal service, development of, I, 300.
Postal Union, general establishment of, II, 126.
Postlethwayt, M., statement by, regarding duty of colonies to mother country, I, 36.
Preen, John, an English merchant, in early colonial trade, I, 24.
Preferential duties, English, in aid of colonial industries and trade, I, 47.
President, powers of, regarding commerce, II, 243.
Pribilof Islands, discovery of, II, 216; lease of sealing privileges on, II, 218; international controversy regarding sealing on, II, 235, 236, 238; seal rookeries on, II, 217; United States secures possession of, II, 217.
Pribilof, Russian navigator, II, 216.
Price fluctuations, 1865–1900, II, 64; 1900–1913, II, 86.
Pring, Martin, voyage of, I, 148.
Privy Council, authority exercised by, over colonies, I, 55.
Production, small-scale, I, 179.
Production bounties, 1785–1789, I, 141.
Protective tariff and foreign trade, II, 40.
Public Health Bureau, work of, II, 250.

Quarantine service, regulation of, II, 250.

Railroads, beginning of, I, 221, II, 322; beginning of regulation of, I, 294; competition of, with coastwise lines, 1850–1860, I, 345; competition between, and coastwise carriers after 1860, I, 350; connect Central States with Atlantic coast, I, 240; increase and extension of, 1840–1860, I, 228; increase in traffic via, in 1860, I, 238; land grants to, II, 62; take traffic from Mississippi River, I, 246.
Reciprocity, Act of 1815, II, 297; Act of 1817, II, 297; Act of 1828, II, 297; agreements under McKinley and Dingley Acts, II, 342; treaties, II, 298; treaties and agreements, list of, II, 345; Treaty of 1854 regarding the fisheries, II, 226; *see also* Treaties.
Revenue Cutter Service, work of, II, 248.
Revolution, causes of, I, 123, 144; commerce of colonies during, I, 122; commercial legislation during, I, 133; effects of, upon American commerce, I, 122, upon American shipping and ship-building, I, 123, upon the fisheries, I, 158; import duties during, I, 134; interstate trade after, I, 172, maritime conditions after, I, 184.
River trade, active period of, I, 241, 246.
River and harbor legislation, controversies over, II, 324; from 1823 to Civil War, 321; from the Civil War to 1900, II, 323.
River and lake navigation, treaties concerning, II, 141.
Rivers, as highways of inland commerce, I, 13; early fur trade on, I, 7; fall line of, I, 9.
Rivers and harbors, improvements of, II, 319–324; 1789–1823, II, 319; *see also* Internal Improvements.
Rocky Mountain States, resources and industrial characteristics of, I, 199.
"Rolling roads," I, 204.
Royal African Company, slave trade of, I, 101.
Royal Mail Steam Packet Company, II, 123.
Russian-American Company, II, 99, 217.

Sagadahoc, colony planted at, I, 23.
Salem, trade of, with Far East, I, 185.
Salmon, beginning of canning of, II, 213; canning industry established at Sitka, II, 100; fisheries, II, 212; quantity canned, 1870–1910, II, 214; regulative measures by Government to preserve, II, 215.
San Francisco, arrivals of vessels at, 1850–1853, I, 359; center of Pacific whale fishery, II, 220; the leading trade center on Pacific coast, I, 361.
Sandalwood trade of Hawaiian Islands, II, 101.
Sanderson, a typical slave-ship, I, 103.
Sardine canning, II, 175.
Savannah, first vessel to cross ocean with aid of steam, II, 121.
Scotland not included in acts of 1651 and 1660, I, 41.
Seal fishery, lease of, II, 218; profitableness of, II, 219; source of, II, 216.
Seals, increase of, since 1910, II, 219; reckless killing of, II, 217, 219.
Seamen, act of 1915 regarding, II, 307; legislation regarding, II, 305.
Secret Service, establishment of, II, 248.
Settlements, location of, in 1789, I, 202; in America, planted by chartered companies, I, 18.
Seybert, Adam, II, 15, 16, 24, 27.
Shad, establishment of hatcheries for, II, 194; transplanting of, to Pacific streams, II, 222.
Shad fishery, after 1860, II, 175; early, II, 193; of Chesapeake and Delaware Bays, II, 196; statistics of, 1908, II, 195.

Sheffield, John, Lord, champion of British shipping interests, II, 13; statement by, regarding Acts of Trade, I, 51.
Shellfish fisheries, II, 177, 185.
Shenandoah, destructive work of, II, 171.
Ship-building, American tariff concessions to aid, II, 300; decadence of, after Civil War, II, 316; early activity of colonies in, I, 73; effects of Revolution upon, I, 125; influence of American navy on, II, 313; policy of United States towards, II, 295–318; registry laws regarding, II, 301; stimulus to, by Spanish-American War, II, 316.
Ship subsidies, amounts of, 1847–1858, II, 310; law of March 3, 1891, II, 311; partial revival of, in 1865, II, 310; 1845–1872, II, 308.
Shipping, conditions affecting, after the Revolution, II, 10; decline in, 1807–1815, II, 29; disadvantages of, in competition with British shipping, II, 11; discriminating duties in aid of, I, 139; effect of Civil War upon, II, 59; effects of Revolution upon, I, 124; growth of, 1790–1807, II, 27; legislation, act of 1914, II, 347; policy, American, summary of, II, 317; revival of, in foreign trade, 1846–1860, II, 51; statistics of, engaged in carrying trade, 1789–1815, II, 28; tariff provisions affording protection to, II, 337; treatment of, in commercial treaties, II, 138.
Shipping reciprocity, II, 295–299; in act of 1815, II, 36; list of treaties establishing, II, 339; results of, II, 298; tariff provisions regarding, II, 338.
Shore line, formation of, on Atlantic coast, I, 6.
Slater, Samuel, builder of the first cotton mill, I, 174.
Slave, population, growth of, 1714–1790, I, 102; trade, close relation of, with rum-manufacturing business of New England, I, 103; trade, 1830–1860, I, 248; trader, profit of, I, 103; *see also* African Slave Trade.
Slavery, five causes of, I, 102.
Slaves, first sale of, in continental America, I, 101; tax on, I, 103.
Smith, Captain John, the second Cape merchant, I, 22; visits New England coast, I, 148, 152.
Smuggling, three facts regarding, I, 51.
Society of Particular Adventurers for Traffic with the People of Virginia in Joint Stock, formation of, I, 24.
Society of Shipowners of Great Britain, I, 188.
South Atlantic ports, coastwise commerce at, 1830–1850, I, 344.
Southern colonies, coastwise trade between, and New England, I, 169.
Southern States, growth of internal commerce in, 1830–1860, I, 240; indirect trade of, II, 44; resources and industrial characteristics of, I, 197.
Spaniards, mining operations of, in the New World, I, 17.
Spanish Succession, War of, I, 83.
Sponge fishery, II, 201.
Squeteague fishery, II, 176, 198.
Stamp Act, enactment and repeal of, I, 48, 100.
Standards, Bureau of, work of, II, 260.
State, Department of, commercial functions of, II, 244.
Steamboat-Inspection Service, work of, II, 261.
Steamboats, first use of, on the Mississippi, I, 213.
Steamship lines, conferences of, II, 123; consolidation of, II, 123; increase in, 1850–1860, I, 346; organization of, II, 121, 122.
Sturgeon fishery, II, 196.
Stuyvesant, Peter, administration of, I, 30.
Sugar Act of 1733, opposition of colonists to, I, 100; provisions of, I, 48; repeal of, I, 49; slight effect of, I, 95.
Sugar industry of Hawaiian Islands, II, 103.
Swedes, early settlements founded by, I, 30.

Tariff, concessions in, to aid American ship-building, II, 300; law of Pennsylvania, 1785, I, 137, 139; legislation of Pennsylvania, model for United States act of 1789, I, 137; policy, adoption of protective, I, 336; provisions concerning the shipping and foreign trade of the United States, II, 335–351; reduced to revenue basis, I, 226; revision of, I, 294; system, revision of, 1909–1913, I, 322.
Tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building, tabular digest of provisions in, II, 349.
Tariffs imposed by foreign countries, 1900–1913, II, 91.
Taxes on exports, I, 140.
Tehuantepec, Isthmus of, intercoastal trade via, I, 362.
Telegraph service, beginning of the, I, 299; II, 127.
Tobacco, culture of, in Porto Rico, II, 104; export duties on, I, 60; exports of, 1900–1913, II, 89; favorite method of smuggling, I, 166; first valuable import from American settlements, I, 38; hauling of, over "rolling roads," I, 204; indirect exportations of, I, 42; medium of exchange in Virginia and Maryland, I, 82; monopoly of importation of, I, 38; one of the "enumerated articles," I, 40; profitable culture of, in Virginia and Maryland, I, 10; reexport of, from Great Britain, I, 124; use of, as money, I, 109.
Tonnage duties levied by the colonies, I, 63; revised by law of 1790, I, 330.
Tonnage taxes, 1776–1789, I, 140; modification of, II, 299.

Trade, direct, with the Far East, I, 185; of colonies, slight effect of British tax laws, 1764–1770, upon, I, 108; via Pennsylvania Canal system, I, 235; via the railroads between the East and West, I, 237; with non-contiguous possessions, II, 98–115; *see also* Colonial Trade, Commerce, and Foreign Trade.
Trade Acts, *see* Acts of Trade.
Trade reciprocity treaties, II, 144, 340.
Trading companies, place of, in early commerce, I, 175; prior to 1664, II, 117; *see also* individual companies.
"Tramp" vessel, services of, II, 120.
Transportation, development of, 1860–1900, I, 266; 1900–1910, I, 316; early costs of, I, 210; facilities encourage foreign trade, II, 46; facilities, extension of, 1830–1860, I, 227; inland, in 1789, I, 203; organization of, I, 296; public regulation of, since 1900, I, 319.
Treasurer and Company of Adventurers and Planters of the City of London for the First Colony of Virginia, The, I, 21.
Treasury, Department of the, commercial functions of, II, 246.
Treaties, commercial, of the United States, II, 135–153; establishing shipping reciprocity, list of, II, 339; under the Articles of Confederation, I, 143; *see also* Reciprocity.
Treaty of Ghent, foreign trade from, to the Civil War, II, 31–53.
Treaty of 1783, provisions as to fisheries, I, 159.
Trial, the first vessel built in Boston, I, 150.
Trusts, export trade developed by, II, 134.
Turnpike, the first, in United States, I, 204.
Turnpikes, building and aid of, by the States, I, 221.

"Undertakers," functions of, I, 176; monopoly of trade by, I, 27.
United States, economic development of, 1860–1900, I, 254–269; increase in area of, 1830–1860, I, 224; increase in wealth, 1860–1900, I, 257; increase of population in, 1830–1860, I, 224, 1860–1900, I, 256; internal trade of, 1860–1900, I, 270–295; *see also* American.
United States Bank, First, I, 304; II, 19; Second, I, 217, 304.
Universal Postal Union, establishment of, II, 127, 152.

Vessel, entrances and clearances, statistics of, in 1769, I, 171, 1865–1900, II, 65; tonnage, and entrances and clearances in foreign trade, 1860–1900, II, 61.
Vessels, classification of, and compensation allowed for mail payments to, in act of 1891, II, 312; foreign-built, repeal of law regarding admission of, II, 303; gross registered tonnage of, in 1769, I, 92; registry and enrollment of, under law of 1792, I, 330, under law of 1793, I, 332; regulations regarding entrances and clearances of, I,

Vessels—*continued*.
331; *see also* Carrying Trade and Coastwise Lines.
Virginia, Colony established by London company, I, 18; commerce of, becomes free to Englishmen and others, I, 24; first permanent colony in America located in, I, 10; intercolonial trade of, I, 32; placed under royal government, I, 24; taxing of commerce by, during Revolution, I, 134; the London Company and early trade of, I, 21.
Virginia Company, I, 176.

War, Department of, establishment of, II, 245.
War of 1812, causes of, II, 18, 30; effect of, on commerce, I, 335; results of, on American trade, II, 32.
Wars of England favor local self-government in colonies, I, 56.
Washington, George, I, 184; II, 174, 182, 271.
Water power, development of, by Federal Government, II, 331; New England's development attributable to, I, 8.
Waterways, betterment of methods and agencies for improvement of, II, 328; "continuing contract" system for improvement of, II, 329; Federal regulation of, II, 331; policy regarding, 1900–1912, II, 325.
Wealth of United States, increase in, 1860–1900, I, 257.
Weather Bureau, work of, II, 254.
Webster, Daniel, espouses cause of protection, I, 220.
West, rise in trade of, after War of 1812, I, 214; the War of 1812 and growth of the, I, 212.
West Indies, beginning of Virginia's trade with, I, 33; closing of ports of, II, 12; New England's early trade with, I, 32; proposed retaliatory measures for closing ports of, II, 7; restriction of trade with, I, 129; resumption of trade with, in 1763, I, 99; trade with, before 1789, I, 157, during eighteenth century, I, 93.
Whale fishery, after Revolution, II, 10; decline of, II, 161, after 1860, II, 172; depressed condition of, after Revolution, I, 161; destruction of ships engaged in, during Civil War, II, 171; expansion of, after treaty of peace in 1763, I, 105; extended to Pacific Ocean, II, 159; flourishing condition of, in Massachusetts, II, 160; of Pacific coast, II, 220; revival of, after War of 1812, II, 158; status of, in 1774, I, 157; 1860–1910, II, 171.
Whaling, industry, establishment of, I, 152; ships increase trade at Hawaiian Islands, II, 102.
Whisky rebellion, I, 211.
Whitney, Eli, inventor of the cotton-gin, I, 174.
Wilderness Road, I, 204.
Wilkinson, James, treasonable negotiations of, with Spanish authorities, I, 206.
Windom Committee, report of, II, 323.
Wireless telegraphy, establishment of, II, 128.